

MULTIVARIATE ANALYSES OF THE SELF CONCEPT
WITH SPECIAL REFERENCE TO CROSS-CULTURAL
COMPARISONS BETWEEN NEW ZEALAND AND KOREA.

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by

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ABSTRACT

The patterns of differences (Sex, Religion, Social Class and Education Level) in actual and ideal self concepts were compared between Korean and New Zealand young adults aged 16-24 attending high school or university. The factor structures of the both actual and ideal self concepts and the subjective changes (Past, Present and Future) in self concepts of these subjects were also studied and compared.

A Self Concept Questionnaire devised by the author was used and was shown to be a considerable value in gathering data about self concepts.

The data were analysed by a series of MANOVA and Principal Components Analyses. With a few exceptions in some analyses, the results revealed relatively clear patterns describing the nature of the self concepts of both Korean and New Zealand young adults.

In the self concept of the Korean subjects, factors Sex and Religion were found to play a significant role, whereas for the New Zealand sample, factors Sex, Religion and Social Class were significant. Factors Education-Level and Time were found to affect both samples in similar ways.

When the two cultures were compared in terms of the patterns of differences, they were more different than alike. The results from the factor analyses also showed greater dissimilarity in the factor structures of both the actual and ideal self concepts between the two cultural samples. However, the patterns of educational level and subjective changes in self concepts showed very similar trends.

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CHAPTER ONE

INTRODUCTION

I. GENERAL STATEMENT OF THE PROBLEM

Culture may be defined as a set of common and standard behaviours and beliefs shared by a group of people and taught by them to their children. Therefore different nations have different cultures; in addition, within a complex society, there may always exist a number of diverse subcultures. Cultures, in a general sense, can be thought of as fostering or tending to emphasize a particular psychological posture in an individual. A person's view of himself is generally compatible with that of his culture, although his view need not be bound by it. Serpell (1976) wrote:

"Culture has been conceived as affecting motivation at the level of the total personality, of attitudes and of specific motives; it has been conceived as affecting cognition at the level of the broad structure of specific processes such as reasoning, communication and perception". (P 17)

Bidney (1949) also made a similar statement that culture is an attribute of human behaviour and is therefore to be studied as an integral part of human behaviour and not as if it was a dynamic entity capable of acting and developing apart from the organism which express themselves through it. Both statements indicate that personality, attitude and self concept are products of socio-cultural participation and recognition in a given culture.

It would seem (Zavalloni, 1973) that H.C. Triandis is the author of the term "subjective culture", and he

defined it (Triandis, 1972) as a cultural group's characteristic way of perceiving its environment. Among the key concepts which may be used in the analysis of subjective culture are personality, attitudes, roles, self concepts and values. The self concept characteristic of cultural groups is one of the crucial elements of subjective culture, since one cannot understand and predict human behaviour without a knowledge of the subject's conscious perceptions of his environment and of his self, as he sees it in relation to the environment (Zavalloni, 1973; Parsons and Shils, 1957).

There are numerous studies reported in the literature dealing with some aspects of the self concept within a single culture or/and between two or more sub-groups in a complex society (they will be reviewed in detail later). However, until quite recently little has been explored empirically in a cross-cultural perspective mainly because of the difficulty in constructing valid instruments which could convey, when translated, identical meanings to the subjects.

The broad objective of this study is to make an empirical search for regularities in the self concept of senior high school and university students of two cultures, South Korea and New Zealand, and to compare similarities and differences of their characteristics. Thus, we may be able to gain a fresh perspective of each society and culture to account for some of the behaviour of young people moving into adulthood. For the purpose of this study, we shall define young adulthood as the age period from sixteen to twenty four attending high school or university.

The present study is also designed to examine the subjective changes in the self concept of a young adult that can be assumed to go on in the "cognitive sphere" (Feather and Wasyluk, 1973). It is difficult to study the development of a self concept for it calls for close investigation of changes in thought and affect. The objective or external changes can be observed by his family members, friends or any other person with whom he has had close relationship. The two forms need not correspond. He may be externally assimilated in that, to an outside observer, he behaves like others. Yet he may internally have different attitudes, values and ways of thinking from those the others have.

The content of this dissertation should be conceived as an exploratory investigation of self concept difference. It is exploratory, not as a result of the methodology used, but because of the subject matter with which it deals. The major problem which the author is interested in investigating can be summarised as follows:

- 1) To examine the nature of sex difference, religious background difference, social class difference (high school samples only) and educational level difference in self concept and ideal self concept during the period of young adulthood defined as above.

- 2) To examine the pattern of subjective changes in self concept during young adulthood.

- 3) To examine the pattern of factor structure of self concept and ideal self concept of young adults.

- 4) To examine the cultural differences in self concept in relation to the above mentioned questions,

between the two cultures, South Korea and New Zealand.

II. A HISTORICAL OVERVIEW OF INTEREST IN THE SELF CONCEPT

The concept of the self is one that spans many disciplines - philosophy, anthropology and theology, as well as psychology, education and sociology, and one that enters into a wide range of theoretical discussions.

A review of psychological literature concerning the self indicates that much of the contemporary theorizing about the self concept derives from William James, who devoted a significant chapter to the self in his book, "Principles of Psychology" (1890). After James' writing, a number of theorists began to establish and explain their concepts of the self.

However, during the second, third and fourth decades of the twentieth century, constructs concerning the self did not receive much attention from the behaviourist and functionalist psychologies which were dominating the American scene. With the emphasis on the exclusively scientific approach, behaviourists opposed all other schools on questions of method and subject matter. They contended that any theoretical concepts referring to internal phenomena were beyond the scope of psychology and considered self concept not essential in formulating psychological theory.

During this period, social psychologists were generally considered the only groups which had recognized the self. At the beginning of the century Baldwin (1906a, 1906b) and Cooley (1902) developed theories concerning the origin of the self. McDougall (1908) considered self-

regarding tendencies to be among the most important of the sentiments. Gardner Murphy (1947) and Kimball Young (1940) have developed the concept of the self in their treatises on social psychology. But the main body of psychology has only recently recognised the self as a reputable topic for psychological research and inquiry. Sarbin (1952) and Symonds (1951) accorded the resurgence of the self to Gordon Allport's writings, "Personality: A Psychological Interpretation" (1937) and "The Ego in Contemporary Psychology" (1943), while Wylie (1961) noted two influences in her review of the psychological literature on the self. One is the later writings of Sigmund Freud who shifted his emphasis from the role of the id to ego development and functioning, and the neo-Freudian's emphasis on the importance of the self picture and the ego-ideal. The other influence cited by Wylie arises from the fact that psychologists working in clinical areas found the behaviouristic models too limited to account for their clients' behaviour and they were ready to entertain psychoanalytic ideas, particularly of the revised variety.

Meanwhile, as Diggory (1966) pointed out, the Gestalt psychologists expanded their domain from perception to personality, motivation and social psychology with a theory of needs or motives. Koffka borrowed his concepts of motivation and of the behavioural field from the writings of Kurt Lewin (1935), and introduced the ego as quite literally the center of the space-coordinate system of the behavioural field (Koffka, 1935). Lewin and some other Gestalt psychologists also had an interest in the self

concept largely in connection with level of aspiration research and theory (Pepitone, 1968).

Lowe (1961) pointed out that phenomenological self theorists such as Lecky (1945), Rogers (1951), and Snygg and Combs (1949) were another notable impetus to the study of the self concept. They stress the role of the conscious self concept in determining a person's behaviour. They also favoured the cognitive approach as opposed to the behavioural method of general psychology which led only to normative predictions without specifying causal relations. A basic assumption in their method is that one cannot understand and predict human behaviour without a knowledge of the individual subject's frame of reference: behaviour is to be interpreted according to the phenomenal field of the subject rather than to be seen in terms of the analytical categories of the observer.

By 1950 the phenomenological view of the self had become the center of a new movement in psychology, having already generated a substantial number of research studies (Rogers, Kell and McNeil 1948; Hoffman, 1949; Seeman, 1949; Stock, 1949). Since that time for the last two decades there has been an increasingly large number of investigations, particularly with reference to the dynamic importance of the self in determining behaviour. However, they have not been contained within any one theoretical channel, so that studies involving the self concept have spread into many areas of psychology.

III. SOME THEORETICAL CONSTRUCTS CONCERNING THE SELF

In psychological discussions the word "self" has

been used in many different ways. Especially, the term "ego", stemming from the psychoanalytical influence, has been inconsistently used in discussions of the self, and this kind of terminological confusion still persists.

Murphy (1947) and Hamachek (1971) used two terms, ego and self, to explain two phases of the self. They refer to the self as the object of perception, whereas the ego is a system of activities organized around the self to include both self enhancement and self defence. In an explanation similar to this, Symonds (1951) defined the ego as an active process for developing and executing a plan of action for attaining satisfaction in response to inner drives, and the self as the body and mind, and bodily and mental processes as they are observed.

According to Jung (1923), the ego is the conscious part of the personality, whereas the self which includes the ego, is the subject of one's total personality, and includes unconscious as well as conscious tendencies. Contrary to Jung, Sherif and Sherif (1969) distinguished the self as the core of the ego, less extensive than the ego, and involving more important motives as the Gestalt psychologists Koffka (1935) and Lewin (1935) emphasized. Allport (1943) and Sherif (1962) specifically used self and ego as equivalent terms and as a subpart or a subsystem of the personality.

In spite of the differences of opinion as to the meanings of "self" and "ego", it is noteworthy that many psychologists have emphasized in one way or another that these concepts are intimately related to motivated, directed or purposive behaviour. The present author will attempt

to examine some theoretical constructs concerning the self without regard to chronological development except in cases where that is absolutely necessary.

At the beginning of modern psychological interest in the self, James (1890) said that personality implies the incessant presence of two elements, the "I" (pure ego) or the self as knower which actively experiences, perceives or plans, and the "Me" (empirical ego) or the self as known. James thought of the self-as-known as being composed of the material "Me" (e.g., body, traits, abilities, family, home, property, etc.), the social "Me" (e.g., honour, reputation, recognition, etc.), and the spiritual "Me" (e.g., consciousness of active states of thinking, feeling and behaving). The "I" was also said to experience certain feelings in connection with the various "Mes".

In the work of Sigmund Freud, the word "ego" bears most of the emphasis and the word "self" almost none. The ego, as a postulated region of our mental life, acts as an intermediary between the id, the super ego and the external reality (Freud, 1940). The id, according to Freud, has no organization and unified will, only on impulsion to obtain satisfaction for the instinctual needs in accordance with the pleasure principle. The super ego is synonymous with conscience, as he defined it as representative of all moral restrictions, the advocate of the impulse toward perfection (Freud, 1933). The ego is responsible for perceiving inner and outer reality, for regulating behaviour and for controlling our impulses. The ego capacities of perception and manipulation are assumed

to be inborn, but the ego as an organization arises under the influence of the real external world. In contrast to the unorganized and impulsive id, the organized and coherent ego represents all that is sane and rational in mental life (Freud, 1921, 1923). When Freud speaks of self preservative drives, he apparently refers to the maintenance system of the person's life, composed of the id, the ego, and the super ego.

Adler's self is a highly personalized, subjective system through which a person interprets and gives meaning to his experiences. Unlike Freud who made the unconscious the center of personality, Adler stressed consciousness as the center of personality. He viewed man as a self conscious being who is capable of planning and guiding his actions to fulfill his unique "life style" (Adler, 1927).

In Raimy's view, the self is the map which each person consults in order to understand himself, especially during moments of crisis or choice. He further explained that the self concept is a focal point of organization of both behaviour patterns and personality, and that the self concept both influences and is influenced by the individual's behaviour (Raimy, 1948).

Sarbin (1952) viewed the self as a cognitive structure which contains substructures (empirical selves) whose properties are deemed by the total inter-behavioural field. His self is empirically derived and is subject to continual and progressive change in the direction from low-order inferences about simple perceptions to higher-order influences about complex cognitions. To describe this, he suggested five developmental stages of empirical selves; the somatic

self, the receptor-effector self, the primitive construed self, the introjecting - extrojecting self and the social self.

Allport was one of the strongest advocates of the self as a key feature of personality (Allport, 1937, 1943). He viewed the self as a complex aspect of personality gradually evolving and exerting a greater and greater influence over behaviour. He invented a new term "the proprium", to stand for self-experiences, and delineated the seven different aspects of the proprium, each maturing at a different period during the first twelve years of life. These are (1) bodily self; (2) self-identity; (3) self-extension; (4) self-image; (5) self-esteem; (6) self as rational copier and (7) appropriate strivings, all of which can clearly be objects of our knowledge (Allport, 1955). Although these seem to evolve at successive stages of life, he explained in his later writings (Allport, 1961) that several or even all aspects coexist in the individual's currently perceived experiences and his unique pattern of adaptation. In the adult, if the proprium has developed normally, it is the major internal or subjective source of behaviour.

Hilgard (1949) reviewed the writings about defense mechanisms from Freud to Symonds (1900-1949). He concluded that these mechanisms are not understandable except in terms of a unifying self to which feelings of guilt can be attached. Thus, all defense mechanisms imply self reference. He further proposed a broader view of what he called the "inferred self", in which he stressed continuity of motivational patterns, genotypical patterning

of motives, and the self as a product of interpersonal influences.

In Cooley's general principles, usually referred to as the idea of the "looking glass self", a person's self concept is considered to be dependent on observing the reactions and opinions of others toward the individual. In other words, the personality is formed, not partially, but wholly through the experiences the individual has in interacting with others. Significantly, the individual is thought to be aware of himself and of his actions, and he is seen as an active agent who exercises a degree of control over the action he chooses (Cooley, 1902).

Mead (1934) modified and extended Cooley's looking glass self. His self is an "object of awareness" rather than a system of processes. That is, a person comes to know himself and respond to himself as he sees others responding to him. His self is a socially formed self which grows in a social setting where there is social communication. He considered that the self is composed of various elementary selves which answer to the various aspects of the structure of the social process. Thus a person can have as many selves as there are numbers of social groups in which he participates, such as family self; school self, etc..

Closely related to the social interaction ideas of Mead and Cooley are the views of Sullivan (1953, 1965). He suggested that the self is comprised of various protective measures and supervisory controls which act to decrease the anxiety of interpersonal relationships by sanctioning or forbidding behaviour. He spoke of personifications,

referring to the images one has of oneself or of another, and stressed the evaluative processes of the personifications, i.e., "good-me", "bad-me", and "not-me" divisions of the self concept.

Kelly's "fully functioning self" is also very similar to the approach taken by Cooley and Mead. Kelly (1972) saw the self as unique to each individual, being built from his own biological structure in interactions with his social environment through the accumulation of his experimental background. According to him, the self is not given, but has to be achieved almost entirely in relation to others through continuous social interchange, and has to be understood in terms of others.

Webster and Sobieszek (1974) summarized two major issues about the self in their "Social Self" theory for which they borrowed ideas from Cooley, Mead and Sullivan: the first point is that the individual's self concept is built on the perceived opinions of "significant others", and the second point is that the self evaluation produced in this way has some degree of permanence, and affects the individual's subsequent behaviour in social situation.

For Jersild (1952, 1960), the self is a composite of a person's thoughts, feelings, attitudes, values and commitments which constitutes a person's awareness of his individual existence. The self as a knower and a thing that is known is a person's total subjective environment with a social origin. It is assumed to be an important agent for the organization of perceptions, the assimilation

of experiences, and the determination of behaviour.

Combs and Snygg (1949, 1959) provided particularly clear statements of the phenomenological approach in which personality is considered wholly in terms of the individual's personal conception of the current situation -- his phenomenal field. They wrote:

"All behaviour, without exception, is completely determined by and pertinent to the phenomenal field of the behaving organism". (1959, p 20)

In their theory, the phenomenal self is an extremely stable organization, differentiated out of the phenomenal field, and includes all those parts of the phenomenal field which the individual experiences as part or characteristic of himself. It is the only frame of reference which an individual possesses and as such gives continuity and consistency to his behaviour.

Symonds' (1951) self is wholly subjective and corresponds to the "phenomenal self" described in the current phenomenological approach to the study of human nature. He defined the self as the ways in which an individual reacts to himself. The self consists of four aspects: (1) how a person perceives himself; (2) what he thinks of himself; (3) how he values himself, and (4) how he attempts through various actions to enhance or defend himself.

Rogers' self theory (1947, 1951) and ideas about the fully functioning individual represent a synthesis of phenomenology as developed by Combs and Snygg, social interaction theory as represented in the writings of Mead and Cooley, and of Sullivan's interpersonal theory. The self, which is the nuclear concept in Rogers' theory, is

a basic factor in the formation of personality and in the determination of behaviour. His self is considered as a conscious perception of self, developing as the result of direct experience with the environment, and may also incorporate the perception of others. As changes occur in the perception of the self and in the perception of reality, changes occur in behaviour. The conscious self also tends to take over the government of the total personality.

As examined above, constructs concerning the self play a certain role in most personality theories. There appears to be considerable overlap among their central points, yet differences exist between theories regarding the importance of the self and its meaning in the total theory. Some theories, however, such as that of Rogers are labeled (phenomenal) self theories because of their stress on the key role of the conscious self concept in determining an individual's behaviour. Others such as Freud's are labeled psychanalytic theories, because they are more concerned with the self as part of a dynamic system, and are also concerned with non-phenomenal constructs, e.g., the unconscious self concept. This distinction is basic and well established in the main stream of psychology (Woodworth, 1948; Hall and Lindzey, 1957; Kehas, 1962; Wylie, 1968). However some theorists such as Cooley, Mead and Kelly are more concerned with the socially formed self (often called self-social theories) (Long, Henderson and Ziller, 1967), and are not clearly related to either of these schools. Table 1-1 shows a summary of theories concerning the self roughly grouped into the above mentioned

categories.

In the present study, the emphasis is placed on the phenomenal self concept within self theories. However the author will not hesitate to refer to any theorists whose considerations are deemed helpful to the present investigation.

(TABLE 1-1) FEATURES OF SELF THEORIES

Theorist	Main Theme	Phenomenal or Non-Phenomenal	Influenced By
W. James (1890)	The I (the self as knower) and The Me (the self as known) composed of material, social and spiritual me	phenomenal	18th Century European Philosophy
C. Cooley (1902)	The looking glass self formed through his reflected image to others - socially formed self	phenomenal	James
G. Mead (1934)	The socially formed self grown through social interaction	phenomenal	James and Cooley
E. Kelly (1962)	The fully functioning self to be achieved in relation to others - socially formed self	phenomenal	Cooley, Mead & Rogers
Webster Jr. and Sobieszek (1974)	The socially formed self emphasizing role of significant others	phenomenal	Cooley, Mead, Sullivan & Rogers
S. Freud (1921)	Self reservative system composed of Id, Ego & Superego	partly phenomenal	
C. Jung (1923)	Self as total personality (psyche) composed of conscious ego and unconscious part of the psyche	partly phenomenal	Freud
A. Adler (1927)	Self as a highly personalized subjective system to achieve his unique life style	partly phenomenal	Freud
H. Sullivan (1953)	Personifications with three aspects of interpersonal cooperation, good- me, bad-me, and not-me	partly phenomenal	Freud

(TABLE 1-1) FEATURES OF SELF THEORIES (CONTD.)

Theorist	Main Theme	*	
		Phenomenal or Non-Phenomenal	Influenced by
G. Allport (1937)	The proprium with seven developmental aspects of self-experiences	phenomenal	James and Gestalt theory
T. Sarbin (1952)	The empirically derived self as a cognitive structure with five developmental empirical selves	phenomenal	James and Gestalt
V. Raimy (1948)	Phenomenal self as a map in which a person can understand himself in relation to the outside world	phenomenal	Gestalt
D. Snygg & A. Combs (1949)	Phenomenal self as a stable organization differentiated out of the phenomenal field	phenomenal	Raimy, Rogers & Gestalt
C. Rogers (1951)	Phenomenal self developed as the result of direct experience with the environment and the perception of others	phenomenal	Mead, Sullivan & Snygg and Combs
P. Symonds (1951)	Wholly subjective self as it is perceived, conceived, valued and responded to by the individual himself.	phenomenal	Snygg & Combs
A. Jersild (1952)	Self as a person's total subjective environment with a social origin	phenomenal	Mead, Sullivan & Snygg & Combs

* The term "Phenomenal" relates to self awareness or to events which are observed from a person's own point of view.

IV. DEFINITION OF SELF CONCEPT

As the self has evolved in psychological literature, many psychologists (James, 1890; Jersild, 1952; Hall and Lindzey, 1957; English and English, 1958; Rogers, 1961; Wylie, 1961, 1968; Gale, 1969; Greiger, 1975) have accepted its two distinct meanings. The first meaning can be looked at as a self-as-object ("Me" experience), as it conveys a person's attitudes, feelings and perceptions about himself as an object. That is, it is as if one could stand outside of

himself and evaluate what he sees from a more or less detached point of view. In this sense, the self is what a person thinks of himself. The second meaning may be called the self-as-subject ("I" experience). In other words, the self is a doer, in the sense that it includes an active group of psychological processes governing behaviour and adjustment. It implies a structural aspect of behaviour and can be defined in terms of activities such as thinking, perceiving and coping with the environment.

When we talk about the term "self concept" which is a compound of two words, self and concept, this has come into common use to refer to the first meaning of the self, i.e., self-as-object (Wylie 1961), and it is with the self concept that this thesis is concerned.

Jahoda (1958) and Rosenberg (1965) simply define self concept as attitudes toward the self. O'Hara and Tiedeman (1959) review it as an individual's evaluation of himself. For Combs and Snygg (1959) self concept is "only those perceptions about self which seem most vital or important to the individual himself" (1959, P12). In other words, the self concept can be explained as the cluster of the most personal meanings a person attributes to his self.

In many ways, the most advanced theoretical treatment of this use appears in the writings of Raimy (1948), Combs and Snygg (1959), Rogers (1951, 1959) and the more recent writings of Allport (1955, 1961). Of these Rogers' definition seems to be taken as the most generally acceptable to many psychologists.

He wrote:

"the self concept or self structure may be thought of as an organized configuration of perception of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence". (Rogers, 1951, P136)

Rogers' definition, unlike Combs et al., would subsume the ideal self. This would suggest a very important difference between Rogers and Combs et al. on the very basic level of the definition of self concept. However, Rogers gave a separate definition to ideal self concept in his later writing (1959), as the self concept which the individual would most like to possess, upon which he places the highest value for himself. In all other respects, it is defined in the same way as self concept.

Wylie endorsed the theoretical implications of Rogers' definition and the main contention of the present study in her subdivisions of the self concept.

"The evaluative aspects of the generic self concept rest partly on an assumed division into an ideal self concept and the actual self concept. This is true since discrepancies between these two aspects of the generic self concept are supposedly partly at the base of the evaluative aspects. Consequently, we need to examine the person's ideal self concept as a separate classification". (Wylie, 1968, P740)

The second dimension of self concept with which this study is concerned is that the self can be perceived in categorical or attributive terms such as the personal (private) or social self concepts. Rogers distinguished two basic categories with regard to the self concept in his personality theory. He stated:

"It would appear that when all of the ways in which the individual perceives himself - all perceptions of the qualities, abilities and attitudes of the person, and all perceptions of himself in relation to others - are accepted into the organized conscious concept of the self, then this achievement is accompanied by feelings of comfort and freedom from tension which are experienced as psychological adjustment." (Rogers, 1947, P364)

Wyllie, in a review of theories concerning the self, also commented that "the person often differentiates between the social effects of his behaviour as he sees it (social-self concept), and his own view of his characteristics (private-self concept)" (Wyllie, 1968, P 740). Wyllie's private self concept seems to be very similar to that of Rogers but her social self concept is typically multiple, corresponding to James' various social selves, not to Rogers'.

Moreover, self concepts can be further classified, according to the various values emphasised, into competence oriented self concept, interpersonally oriented self concept, male-valued self concept or female-valued self concept and so on, as will be reviewed in chapter 2.

As change in an individual's self concept is one of the main topics to be examined in this study, the perspective of time in self concept appears as another dimension at which we can look.

Since William James' day there have been many attempts to analyze self conceptions according to their time perspective. James (1892) himself thought of "potential social Me" as distinguished from the immediate present Me and from the Me of the past.

According to Gordon (1968) the overall temporal orientation of the person's self process includes the self

"I used to be", the current perspective of those attuned "being", and the prospective future selves of those engaged in thoughts of becoming. Jersild's self concept is also a composite of his views of what he is, what he has been, and what he might become (Jersild, 1960).

For distinction between the three time perspectives above (past, present and future) the questionnaire used in the present study includes three subscales, each with its own instructions according to the tense of self concepts. Therefore, in each subscale, we can not infer anything about the subject's own tendency to think of himself in the different time senses.

Of a large number of ways in which the self may be described, this thesis will deal with three dimensions – 1) actual and ideal selves, 2) selves perceived in categorical or attributive terms, 3) past, present and future selves – of the self concept which is admissible to awareness of an individual himself. In order to avoid ambiguity and the possibility of confusion in interpretation, the following terms will be used in accordance with the definitions given.

1). Actual and ideal selves

Actual self (concept) – the term is defined as individual's perception of his physical appearance and health state, feelings, his evaluation of his personality, beliefs, attitudes, abilities, ideas and values. It is the way each individual perceives and evaluates himself which represents the notion of self-as-object.

Ideal self (concept) – the self concepts of what the individual would like to be, as seen by himself.

2). Selves perceived in categorical or attributive terms.

Personal Self (Concept) – the self concept which can be described by the individual without deliberately and consciously relating himself to others; in other words, he perceives himself in individualistic terms.

Social Self (Concept) – the self concept as perceived by himself in relation to others and to the environment; in other words, he perceives himself in interpersonal terms.

Achievement Competence Oriented Self (Concept) – the self concept as perceived by himself with regard to his potentiality, ability, proficiency, and accomplishment; its focus is personal rather than interpersonal.

Moral Oriented Self (Concept) – the self concept is perceived by the individual with regard to his modes of behaviour which involve a sense of right and wrong; it has an interpersonal focus.

Sex-Role Stereotyped Self (Concept) – the self concept perceived by the individual against the expectations imposed on him by his sexual role; it is influenced by both personal and social expectations.

3). Past, present and future selves

Past Self (Concept) – the self concept the individual held two years ago.

Present Self (Concept) – the self concept the individual holds at the present time.

Future Self (Concept) – the self concept the individual will come to hold two years later.

CHAPTER TWO

A REVIEW OF LITERATURE

I. SEX DIFFERENCES AND SELF CONCEPT

As Wylie (1968) has stated in her review article, "The Present Status of Self Theory", the available studies of sex differences in the self concept have been related mainly to sex role stereotypes. People have expectations regarding the roles which males and females should play, and individuals live up to these expectations. Thus sex role stereotypes, with their associated social values, influence the self concepts of males and females.

Because of the abundant existence of studies in the literature on sex role stereotypes (Fernberger, 1948; Anastasi and Foley, 1949; Komarovsky, 1946, 1950; Terman and Tyler, 1954; Wylie, 1961, 1968; Tyler, 1965; Maccoby, 1966; Garai and Scheinfeld, 1968; Sherman, 1971; Hutt, 1972; Broverman et al., 1972; Hochschild, 1973; Holter, 1973; Freedman et al., 1974; Maccoby and Jacklin, 1974; Lloyd and Archer, 1976), this review will be restricted to sex role differences in relation to self concepts.

Current personality theory and research seems to suggest that social-personal orientation in the self concept is linked to sex role differences. Important differences in the definition of social sex roles center upon the emphasis on autonomy, activity and independence in males, and the emphasis on social sensitivity, passivity and conformity in females. Evidence supporting this expectation of sex differences comes from studies by Hovland and Janis (1959),

Witkin and his colleagues (1962, 1975), and many other scholars, suggesting that among adults men are relatively autonomous and independent, while women tend to be more conforming, persuasible and field dependent. At the adolescent level, Douvan (1960) found ego integration among boys related to the development of personal, independent standards, while ego integration in girls was linked to interpersonal skills and sensitivity.

In studies by Carlson (1965, 1971) and Carlson and Levy (1968), the subject was asked to choose self descriptive adjectives (or statements) that he believes describe himself. The subject was classified as "socially oriented", if his choice of social items such characteristics as considerate, cooperative and friendly exceeded the number (or score) of personal items chosen; the subject was classified as "personally oriented", if personal items involving such characteristics as ambitious, creative and rational exceeded social items in his self description. In these studies, female subjects in late adolescence and adulthood (ranging in age from 18 to 45) rated themselves higher on the social, but lower on the personal adjectives than did men of the same age.

Rosenkrantz and his colleagues (1968) examined the relationship of self concept to sex role stereotypes on a questionnaire consisting of 122 bipolar items administered to 74 male and 80 female university students (aged 17-25). They found 1) that there exists a strong agreement between the two sexes as to what typical men ($r=.96$) and women ($r=.95$) are like; 2) that the male and female subjects clearly perceive themselves as differing ($P<.001$) along a dimension

of stereotypic sex differences, and 3) that both male and female valued stereotypic traits (see Table 2-1) are perceived as having a similar degree of social desirability for their own sex. They further classified the questionnaire items into three sets which move from maximal discrimination between the means of masculinity and femininity responses in the stereotypic items to minimal differences between the means of masculinity and femininity responses in the non-differentiating items. Table 2-1 lists some of the male and female valued stereotypic characteristics which can be closely related to some of the questionnaire items used in the present study. These items showed at least 75% agreement among the subjects of each sex as to which item was more descriptive of the average man than the average women, or vice versa.

(TABLE 2-1) STEREOTYPIC TRAITS BY ROSENKRANTZ ET AL.

Male-Valued Traits

Aggressive	Worldly
Independent	Adventurous
Unemotional	Acts as a leader
Hides emotions	Self confident
Objective	Ambitious
Dominant	Not dependent
Likes Math and science	Thinks men are superior to women
Active	Able to separate feelings from ideas
Competitive	
Logical	

(TABLE 2-1) STEREOTYPIC TRAITS BY ROSENKRANTZ ET AL. (CONTD.)

Female-Valued Traits

Neat	Gentle
Interested in own appearance	Strong need for security
Expresses tender feelings	Aware of feelings of others
Religious	Talkative

Findings of Rosenkrantz et al. and others (which will be reviewed below) suggest not only that there exists pervasive and persistent sex role stereotypes, despite the apparent fluidity of sex role definition in contemporary society as contrasted with the previous decades, but also that the university population, a group which tends to be critical of traditional social norms and conventions, nonetheless believes that the existing sex role stereotypes are desirable as attributes of their ideal selves.

Elman, Press and Rosenkrantz (1970) administered a 60-item bipolar stereotype questionnaire to 52 male and 52 female junior college students to investigate the effects of sex role stereotypes and sex role ideals on individual self concept and ideal self. They reported that male and female responses on ideal male and female traits were more similar than their responses on typical male and female traits. The real self images resembled more the perceived stereotypes than the ideal sex roles, and the ideal self images more closely resembled the sex role ideals than they resembled the stereotype. Both males and females perceived ideal men and women as possessing many of the traits

presently valued in the opposite sex. These findings suggest a shift by individuals toward more flexible sex typing.

The findings of Deutsch and Gilbert (1976) are consistent with those of Elman et al. (1970). A sample of 128 college women (N=64) and men (N=64) used the Bem Sex Role Inventory to describe their concepts of real self and ideal self. Both male and female subjects rated themselves for their real and ideal selves in the direction of their own sex stereotypes and showed statistically significant differences between their real self means ($P < .0005$) and between their ideal self means ($P < .0005$). However, in ideal self, males indicated more sex typing, whereas females described less sex typing or androgynous ideal self.

William and Seward (1971) also found similar sex differences on a 12-point semantic differential scale for a group (N=210) of Chilean male and female adolescents. In their study, both boys and girls 1) showed clear-cut differences in their responses regarding the traits of male and female: male as being less sensitive, less friendly, less physically attractive, but braver, stronger, wiser, more competitive, more active and of higher leadership as compared to women; female as being softer, more beautiful, more sensitive as well as weaker, less brave and less active, 2) registered nearly no differences between their self concepts and the above mentioned sex role stereotypes, and 3) assessed their own present self qualities as considerably below their ideal self for their sex.

As early as in late 1950's, McKee and Sherriffs explored questions concerning the sex stereotypes and self concepts (McKee and Sherriffs, 1957, 1959; Sherriffs and

McKee, 1957). They used Sarbin's Adjective Check List (ACL) for establishing sex stereotypes, and found that real self (Present Self) and ideal self are found to be sex typed in both sexes with female university students being more sex typed in real self and less sex typed in ideal self than male students. However, after a close examination of individual items of the ACL, they concluded that females, though often including male attributes in their ideal self, do not yet, by and large, desire a life of vigorous masculinity and, that in their everyday life (Real Self), females still feel that they must behave according to the traditional stereotype.

A similar finding was that of Kuhn (1960) who using the Twenty Statements Test for high school and university students, found that females describe their real self with sex more frequently and saliently than males.

A study by McDonald and Gynther (1965), which used the Interpersonal Check List (LaForge and Suczek, 1955) with senior high school students also reported significant sex differences in their self concepts. Whereas the males described themselves as being more "Dominant" than the females in terms of assertiveness, aggressiveness and leadership qualities, the females rated themselves higher on the "Love" variable, a measure of friendly, warm and cooperative characteristics. The same pattern was also found for the ideal self descriptions. In 1968, McDonald replicated the experiment of McDonald and Gynther (1965) with a larger sample and confirmed that the previous findings concerning the sex variables conform with the traditional sex role expectations for the present self and ideal self descriptions.

O'Leary and Depner (1975) also examined self and sex role stereotypes among college males ($N=47$) and females ($N=47$) in view of the effects of the consciousness raising efforts of the female liberationists and women's study programmes on campuses across the United States. Using a 21-item bipolar sex role questionnaire based on the items used by Rosenkrantz et al. (1968), they found that the males rated themselves as significantly more aggressive ($P < .01$), independent ($P < .05$), dominant ($P < .01$), stronger ($P < .05$) and tougher ($P < .01$) than the females rated themselves. However, the females perceived themselves as significantly brighter ($P < .01$) and more responsible than the males. No significant differences were obtained between the males' and females' perceptions of their real competence, competitiveness, successfulness and rationality. This finding is not consistent with those of studies reviewed above which distinguished between the importance of personal achievement to the self concept of boys and personal attractiveness and social relations to girls. This seems to indicate that traditional sex role patterns are being challenged by the recent feminist movement.

On the other hand, in studies reviewed below, which are not particularly related to the question of sex role stereotypes, a very similar trend in sex differences seems to be found in the self concepts of males and females.

Zahran (1967), in a study of 170 adolescents (13 - 15 years of age), found that girls scored higher than boys on sociability, humanitarian interest, dependence, sensitivity, obedience, patience and tolerance. Boys on the other hand, were more confident, self accepting, field independent, active,

dominant, and realistic. He further pointed out that sex differences in self concept are sometimes so large that one cannot defend mixing the sexes as subjects in self concept studies.

Findings of Sarbin and Rosenberg (1955), using a modified Group's Adjective Check List with 100 university students showed that men significantly exceeded women in checking the following adjectives as self descriptions: versatile, intelligent, frank, ambitious, steady, individualistic, masculine, logical, adventurous, realistic, deliberate and efficient. Women exceeded men in checking feminine, emotional, affectionate, pleasant and temperamental.

Douvan and Gold (1966) and Rosenberg (1965) also found the general distinction between the centrality of personal achievement to self concept in boys, and the importance of personal attractiveness and sociability to girls.

In a study by Herman (1971), significant sex differences were found among tenth grade non-matriculation students, with girls more concerned with weight, appearance, personal relationships, and with boys more concerned with school progress. Kosa, Rachiele and Schommer (1962) and Veness (1962) also found that males perceive themselves more concerned with school progress than females.

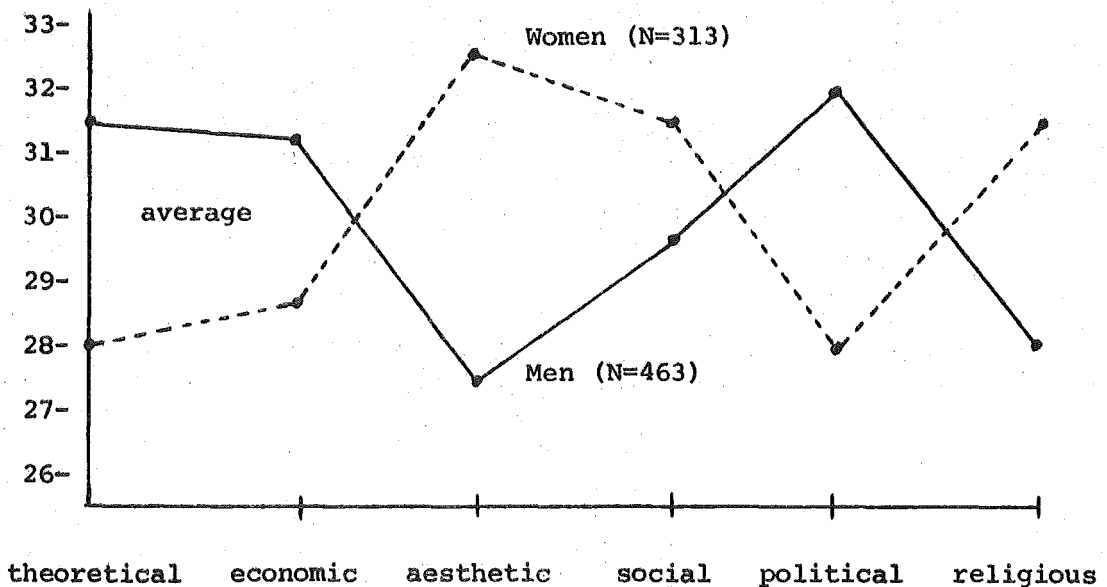
Nystul (1974) utilized the Tennessee Self Concept Scale with 168 university students (aged between 18 to 22) and found a significant sex effect at .05 level showing females to have a more positive feeling about their identity than males and to have less basic personality defects and weaknesses than males.

According to Coopersmith (1967) feelings of self esteem are generated by four sources: power, significance, virtue and competence. Power refers to a person's influence and control over other people; significance is concerned with the degree of acceptance, attention and affection that others provide; virtue is related to one's standards of morality and ethics; competence refers to the achievement of successful performance. Whiteside (1976), in her study of sex differences in self perception as related to ideal trait selections used the Ideal Other Questionnaire and found that among twelfth grade boys (N=58), 46.6% chose "competence" and 29% chose "virtue" as their ideal traits. On the other hand, almost 66% of the girls (N=70) selected "virtue" and their second choice made by 17.1% of the sample was "competence". But in this study, limiting subjects to only four trait alternatives may be influenced responses of the subjects and caused some inaccurate reports, or at least forced respondents to choose less preferred items which they would have avoided if a wider choice had been available.

Allport, Vernon and Lindzey (1960), in their famous book "A Study of Value", reported that men and women scored very differently on the six value scales; women generally revealed a greater interest in arts, stronger emphasis on religion, and greater concern for the welfare of others as basic life goals, whereas men showed a preference for economical, political and theoretical values, demonstrating a greater interest in abstract ideas and practical success, and a stronger desire for prestige, influence and power as

life goals. These differences are borne out both by other empirical evidence (Didato and Kennedy 1956, Traxler and Vecchione 1959, Oetzel, 1966) and in practice. Figure 2-1 shows the difference in composite psychographs between men and women on the Allport Vernon study of values.

(FIGURE 2-1) PSYCHOGRAPHS OF ADULT MEN AND WOMEN ON THE ALLPORT-
VERNON STUDY OF VALUES (FROM TYLER, 1965)



Among pre-adolescent and adolescent children, there seems to be no clear evidence of sex differences which conform to the patterns expected from sex role stereotypes.

Amatora (1957) found that girls (N=250) at 9 - 13 years of age levels rated themselves generally more favourably on scales for courtesy, honesty, patience, religiousness, neatness, sociability, dependability, thoughtfulness, sense of humour and popularity than did the boys (N=250). There were no scales on which the boys' self ratings were consistently more favourable than girls across these age levels. She used her Child Personality Scale

with 22 personality traits.

In contrast to the results of Amatora, Smith (1975) found, in his study using the Sear's Self Concept Inventory with a 48-item rating scale, that 5th and 6th primary school boys rated themselves more favourably than did girls not only on their physical ability, convergent and divergent ability, and school subjects, but also on their attractive appearance, popularity, social relations and social virtues. Bohan (1973) also reported higher self concept for boys than for girls.

Using still another technique Piers and Harris (1964b) found no consistent sex differences in the self concepts of school children in grades three, six and ten.

In a study by Bledsoe (1973), responses of 400 4th and 6th grade boys and girls to individual items of a 30-adjective self concept scale were treated by analysis of variance. All differences were favourable to girls with the single exception of the adjective "brave". Of 29 items, 20 items favoured girls with a statistical significance and no significant differences were found on 9 items. These were polite, studious, clean, thoughtful, kind, sincere, cooperative, careful, friendly ($P < .001$); good, not lazy, smart, truthful ($P < .01$); not mean, dependable, not selfish, honest, happy, obedient, loyal ($p < .05$); fair, helpful, not jealous, a good sport, likeable, not bashful, useful, cheerful, popular (N.S.). His two other studies (Bledsoe 1961, 1964) and several studies (Ausubel et al., 1955; Davidson et al., 1958; Sarason et al., 1958) concerned with self concept and similar measures of mental health, also reported in favour of girls.

In summary, as we look over the preceding studies, methods, instruments and types of subjects varied widely across studies. In some of the studies, exploring sex differences was not the main purpose. In spite of these differences, however, there seems to be some consistent evidence to support the following generalizations:

1) Among pre-adolescent or adolescent children, there seems to be no consistent sex differences in their self concepts. However, it was found that sex differences increase and tend to become more stable for both sexes with age (Kuhn, 1960; Zuk, 1958).

2) Among senior high school and university (college) students, the findings seem more definitely to confirm that commonly accepted sex-role stereotypes are incorporated into their self concepts and ideal self of both men and women, despite the fact that traditional sex role patterns are presently being challenged by the feminist movement.

3) Females tend to experience and represent the self more in the following items: socially sensitive, passive, obedient, conforming, dependent, warm, expressive, considerate, cooperative, religious, neat, friendly, attractive, patient, emotional, pleasant, affectionate, honest, popular and virtuous, whereas males tend to experience and represent the self more in the following items: competent, active, independent, adventurous, logical, rational, autonomous, creative, ambitious, aggressive, unemotional, dominant, tough, competitive, successful, objective, brave, strong, assertive, responsible, realistic, intelligent, steady and of leadership.

4) Females tend to be more sex typing in their actual self concept and males tend to be more sex typing in their ideal self than the opposite sex.

5) Actual self concepts of both males and females are more sex typed than are the ideal selves of the two sexes.

6) Both males and females assess their actual self as considerably below their ideal self.

II. RELIGIOUS BACKGROUNDS AND SELF CONCEPT

It is commonly observed that the religious beliefs of individuals influence and give direction to their behaviour and personality as do sex role stereotypes and the life styles of their social classes.

There have been, of course, many empirical studies that show significant differences in beliefs and personality traits between groups varying in religion.

However, an examination of classification by religion reveals that, as Scobie (1975) stated, there is a tendency in the psychology of religion to restrict investigations to the Judaeo-Christian faiths, neglecting a great percentage of the world population who follow some other creed such as Buddhism and Hinduism. Much American research in this area divides the religious population into three groups: Protestant, Catholic and Jew, while the division in England is Church of England, Catholic and Non-conformist.

Buehler et al. (1972), in their study of articles on religion in five major sociology journals during the period from 1890 to 1970, also reported that of the 276

quantitative studies, less than 2% were cross cultural, despite recurrent pleas for more cross cultural data.

As indicated above, there is only limited literature in the area that explores the differential characteristics between members of different religions, particularly between Christianity and Buddhism, while the number of studies within Christianity remains quite large. Therefore the material presented here is only suggestive.

Using the Sarbin's Personality Word Card which consists of 200 adjectives, Meredith (1959) compared differences in self description between two groups of Japanese American college women with Buddhist religious beliefs (N=41) and with Protestant religious beliefs (N=43). He found only five items have significant differences: the Buddhists described themselves as more excitable ($P < .01$), pleasure-seeking ($P < .05$), irritable ($P < .05$), and stubborn ($P < .05$) than the Protestants, while the Protestants described themselves as more religious ($P < .01$). The remaining 195 traits were not found to differentiate between the two groups.

Berkowitz (1967) used the Sensation Seeking Scale (SSS, Zuckerman et al., 1964), which was designed to measure differences in the degree to which persons seek various kinds of stimulation from their environments, to compare American university students (98 males and 100 female), Thai students (196 male and 132 female) and Buddhist monks (89 male). It was found that American students gained the highest score on the SSS (male = 15.06, female = 16.71) and the monks the lowest (10.22), while the Thai students' scores (male = 12.9, female = 14.75) fell between the scores

of the other two groups. This result confirmed Berkowitz's prediction which was based on the assumption of the influence of Buddhist teachings calling for a renunciation of a great deal of worldly excitement, but was in contradiction to that of Meredith (1952) indicating that Buddhist students described themselves as more excitable and more pleasure-seeking than the protestants who believe in "the most materialistic religion in the world" (Temple, 1960; de Rougemont, 1957).

Since very few empirical studies of personality are directly relevant to this area, there seems to be no way other than to rely on comparisons of the main ethical conceptions of the two religions.

The main direction in Buddhist ethics is negative, denying of emotional expressiveness, passive, pessimistic, quietistic, individualistic and non-social, as described by Hume (1959) who compared the two religions, Buddhism and Christianity as follows:

1) Both religions emphasize a moral life: Buddhism enjoins a morality which is apart from deity, and Christianity enjoins a morality which is likened to the character of God.

2) Both religions diagnose selfishness as the immediate cause of human misery: Buddhism prescribes as the cure a negative self suppression which is chiefly self-benefiting and subtly self-centered and Christianity prescribes as the cure a positive love for others which is altruistic and socially centered.

3) Both religions teach a gospel of salvation: Buddhism teaches the salvation of the individual apart from

society and Christianity teaches the salvation of the individual and of society.

4) Both religions have produced monastic institutions: Buddhism regards the monkish life as intrinsically superior and Christianity teaches the sacredness of all social life, though it is proper to observe that in the Europe of the Middle Ages, the balance of Christian teaching on this point was, perhaps, somewhat closer to Buddhism than it is today. Christianity appears to have shown more historical flexibility than Buddhism.

5) Man in Buddhism is a worthless, temporary conglomerate. In Christianity every human individual is a child of God. Life in Buddhism, because of its sufferings, is hardly worth living. In Christian life, despite its sufferings, it is progressively worthwhile.

Another category which has been neglected in the scientific study of personality and attitudes in relation to religious backgrounds is that of atheists, agnostics, and non-believers. These persons including non-affiliated believers Vernon (1968) called the religious "nones". He further pointed out that despite the fact that "nones" serve some societal functions to fulfill the integration of a society (Luckman, 1967) as the affiliated religionist do, they are rarely singled out for specific analysis.

Nathanson (1955) also indicated that whenever moral or religious questions are being considered, opinions of Catholics, Protestants and Jews are sought, while the unchurched are almost never consulted. Lipman and Vorspan (1962) even suggested that the atheist, agnostic and non-believer, to some degree, have become second-class citizens.

However, considerable attention has been given to differences which are related to various degrees of religious devotion. As the religious "nones" seem to be closely related to those studies, some of them will be included in this review.

Brown and Lowe (1951), in their study using the MMPI, the Minnesota Personality Scale (MPS) and the American Council Education (ACE) Psychological Examination, made a comprehensive comparison between Bible college students (N=35), Protestant believers (N=364) and Non-believers (N=50) among university students. Their findings were:

- 1) Regarding intelligence measured with the ACE, Non-believers were superior to both Bible students and Believers ($P < .01$ for both) and no difference was found between Believers and Bible students. This finding is in line with those of Symington (1935) and Gilliland (1940) who reported that religious belief had a negative correlation with intelligence.

- 2) On the Depression scale of the MMPI, male Non-believers scored higher ($P < .05$) than Believers which indicated a tendency of the former groups towards pessimism, worry and introversion. On the Hysteria scale which measures a tendency of individuals towards the development of physical symptoms of a conversional type, male Bible students scored higher (but not significantly) than male Non-believers. The most pronounced difference between male Non-believers and the two other groups appeared on the Interest scale on which the former groups scored markedly and significantly higher indicating that they had

a basic interest pattern more like that of the opposite sex than did male Believers and Bible students.

3) With the MPS, both male and female Bible students scored higher (at or above 85 percentile) than the other two groups, and Believers were higher than Non-believers (at or below 15 percentile) in Morale (indicating a greater degree of confidence in society's institutions and a greater optimism regarding the future); Family Relations (indicating more harmonious interpersonal relationships), Social Adjustment (indicating the degree of social maturity); Emotionality (indicating a greater stability and self possessiveness) and Economic Conservatism (indicating strong conservative attitudes towards economic and industrial problems).

Bohrnstedt et al. (1968) also compared the MMPI scores of Catholics, Protestants and those of no religious identification (NR) among 1568 university freshmen. For both males and females significant differences were found on the Depression (D), Hysteria (Hy), Interest (Mf) and Schizophrenia (Sc) scales between the NR and the other two groups with NR's scores being the highest, followed by the Protestants and Catholics in order. The differences between the latter two groups were found to be insignificant.

Of these findings, the negative correlation between religiosity and Hysteria was not consistent with results reported by Brown and Lowe (1951). All other findings were consistent.

In a study by Martin and Nichols (1962), 50 religious and 50 non-religious undergraduate students were compared with their scores on the Paranoia (Pa) and the

Interest (Mf) Scales from the MMPI, and the California F Scale (CFS). Correlations between religious belief and Pa, and religious belief and Mf, were both found to be insignificant, and even to be in the opposite direction from that found by other investigators (Brown and Lowe, 1951; Broen, 1955; Bohrnstedt et al., 1968). The correlations with CFS for authoritarianism and with Lie Scale which measures a stronger tendency to choose responses which would place respondents in the most favourable light socially, were also insignificant.

In comparison with the above-mentioned findings, other investigators have generally placed a negative picture of the person who professes religious beliefs: religious belief has been found to correlate positively with the Paranoia Scale of the MMPI (Broen, 1955), with mental illness (Dayton, 1940; Slater, 1947; Beck, 1967), with conservativeness (Eysenck, 1954; Argyle, 1958; Middleton and Putney, 1962; Coates, 1973), with authoritarianism (Gregory, 1957; Rokeach, 1960; Brown, 1962; Stanley, 1963) and with dogmatism (Rokeach, 1960; DiRenzo, 1967; Kilpatrick et al., 1970; Di Giuseppe, 1971) which is defined by Rokeach (1960) as close-mindedness, acceptance of proof by authority and intolerance of people who have different religious beliefs. Similar results were found by some clinically oriented experiments in which the religious person was shown to be more conforming and ego defensive, while the non-religious person was more independent (Dreger, 1952). Allen (1955, unpublished dissertation quoted by Martin and Nichols in 1962) also found that religious people tended to use conventional, conforming

adjectives in self description whereas non-religious people did not.

In a study by Sarbin and Rosenberg (1955), they compared the self concepts of three religious groups, Protestant (N=100), Catholic (N=52) and no religion (N=31) and found that 1) generally the Catholics described themselves with more interpersonal and religious terms such as considerate, frank, cooperative, sincere, sociable, religious, trusting, honest and good-natured, 2) the Protestants with the terms such as responsible, cheerful, good-natured, honest and sincere, and 3) the non-religious with the terms such as broad-minded, cheerful, cooperative, friendly, independent, reliable and sincere. As they concluded, these findings do not seem to be clearly interpretable. However, their study was partly supported by Rokeach's study on value systems.

Rokeach (1969, 1970) showed systematic relationships between religious beliefs and value systems. He administered his Value Survey, consisting of 18 terminal values and 18 instrumental values, to 1391 American adults over twenty-one years of age. He found that in general, more of the instrumental than the terminal values distinguished between the Christian and the non-religious: Christian groups (Protestants and Catholics) generally put higher value than the non-religious on such social values as being helpful, clean, cheerful, obedient, polite and forgiving, whereas the non-religious generally placed higher value than the Christians on such competence values as being independent, capable, intellectual, logical, self controlled, imaginative and broad-minded. However, no differences

were found between the two groups on such items as being honest, responsible and courageous.

In summary, because of the lack of existing literature which explores the differences in the self concepts amongst the three religious groups (Christians, Buddhists, and non-believers), studies dealing with values, personality traits and attitudes, which make up the person's self-identity, (Magee, 1967; Murphy, 1947) were reviewed. Despite the essential lack of comparability in methods, subjects and the dimensions studied (except those using the MMPI), the findings can be roughly summarized as follows:

- 1) Religious people are found to have somewhat moral-social oriented self concepts and ideal self concept which can be expressed in such terms as religious, obedient, forgiving, good-natured, sincere, polite, clean, cooperative, optimistic, whereas non-believers are found to have somewhat achievement-competence oriented self concepts showing such attributes as being independent, capable, intelligent, logical, self-controlled, reliable, broad-minded and progressive.

- 2) Religious people are found to be more conservative, authoritarian, close-minded, conforming to and dependent upon authority than the non-believers.

- 3) Religious people seem to be more stable than non-religious people on many scales of the MMPI; however, all of the MMPI scores from the involved groups fall within the "normal" range. Therefore statistical differences should not be read to suggest that the non-religious tend to be mentally abnormal. Furthermore several studies have

shown a higher incidence of mental illness among the religious than among the non-religious. Therefore it seems to be impossible to offer any conclusion on the extent religiosity is related to mental or emotional stability.

4) Buddhists are most likely to perceive themselves as being negative, passive, pessimistic, individualistic, non-social and denying of emotional expressiveness, whereas Christians see themselves as optimistic, active, positive and socially oriented.

III. SOCIAL CLASS BACKGROUNDS AND SELF CONCEPT

It seems reasonable to suppose that individuals belonging to the same or similar socio-economic groupings could have similar self concepts and that their self concepts would be different from the self concepts of individuals interacting within other socio-economic groupings.

In a study by Klausner (1953), the Q sorts of 60 statements concerning self concepts were administered to 27 seventeen-year-old boys, and the data were treated by means of the centroid method of factor analysis. His results showed three self concept factors which accounted for most of communalities. The first factor, named "reactive aggression", was very closely associated with lower socio-economic status, and was characteristic of individuals who seem to suffer from insecurity and inferiority (as a consequence of their objective economic and social condition) which they conceal behind an aggressive facade. The second factor named "adjusted inferiority" was

characteristic of individuals from middle class who felt that they were not accomplishing anything in life, but in the social sphere, they perceived themselves as well-liked, likeable, as having warm relations with others, and as having attractive personality. The third factor was characteristic of upper class people who were the most self-aggressive and psycho-socially isolated. Thus it was named "socially isolated self-aggressor". Although Klausner concluded that members of the same socio-economic grouping tend to have a more homogeneous self concept, but his results should be considered as only suggestive, as N (=27) was too small.

Bieri and Lobeck (1961) assessed the effects of social class on the self concepts of male members (N=89, mean age = 23.5) of an army reserve unit. The two aspects of the self concept, Dominance (assertive, aggressive and leadership qualities) and Love (friendly, warm and cooperative characteristics), were measured with the Interpersonal Check List (I.C.L.). These investigators found that upper class subjects had a significantly higher mean Dominance score (54.14) than lower class subjects (47.23), while lower class subjects had a higher mean score (51.34) on Love than upper class subjects (47.96), although this difference was not significant. Within class groups, upper class subjects were significantly higher on Dominance (54.14) than on Love (47.96), and lower class subjects were higher (but not significantly) on Love (51.34) than on Dominance (47.23).

McDonald (1968) also reported the similar effects of social class on self concept. Using the same instrument

(ICL) as in the study by Bieri and Lobeck (1961), he found that lower class adolescents (N=128) obtained significantly higher mean scores than did upper class adolescents (N=330) on Love variables of both Actual Self Concept ($P < .01$) and Ideal Self ($P < .01$). Upper class adolescents obtained, as expected, higher mean scores on Dominance variables of both Actual Self and Ideal Self than lower class adolescents, but the differences were not statistically significant.

But in his collaborative study with Gynther (McDonald and Gynther, 1965), no differences were found in Actual Self concepts and Ideal Self descriptions ascribable to social class among senior high school students. They also used the Interpersonal Check List.

Prendergast et al. (1974) also reported no significant relationship of social class to three different aspects of self concept — ability, appearance and interpersonal relations — among 1684 American girls aged 9 - 17. However, a close examination of each item indicated that upper class girls generally had a more positive self image showing higher mean scores than lower class girls on such items as being "quick to learn", "good sports and games", "well-dressed", "good-looking", and as "having many friends". But the effects of differing social position were not very striking. In this respect their results were generally similar to those of Coopersmith (1967) who found a weak, non-significant relationship ($P < .15$) between self-esteem and social class. But there were some interesting and suggestive trends : children in the upper middle class were more likely to have high esteem and those in the lower middle

class low or medium esteem measured on his 50-item Self Esteem Inventory. Rosenberg (1965) also obtained similar weak but significant results indicating that children from high social class were somewhat more likely to accept themselves -- to consider themselves worthy -- than those from the lower social strata. Another similar results were found with 235 Australian university students in a study by Watkins (1976) who reported a significant relationship of self-esteem only to father's educational status ($P < .05$), but not to both the status of the father's occupation ($.10 < P < .20$) nor of the suburb ($.10 < P < .20$) in which a family lives.

On the other hand, the findings of Soares and Soares (1969) are contradictory to those of Rosenberg (1965), Coopersmith (1967), Watkins (1976) and Prendergast et al. (1974). Using a 20 pairs of bipolar traits, they compared actual self concepts and ideal self concepts of 229 children from a primary school in a disadvantaged area and 285 children from a primary school in an advantaged area of the same city. It was found that the disadvantaged children had a higher mean score ($P < .05$) than the advantaged children not only on the actual self concept scale but also on the ideal self concept scale with the difference in the actual self concept being greater than that in the ideal self concept. Another similar study by Soares and Soares (1970-71) using high school sample also reported that the disadvantaged subjects had significantly ($P < .001$) higher self concept scores than the advantaged subjects. However, it should be noted that their disadvantaged groups contained high proportions of blacks and an analysis by

race was not reported. This might indicate that the significant differences are due to the different ethnic and cultural backgrounds, i.e., black vs. white. Some support for this position can be found in Williams and Byars (1968), Powers et al. (1971) and Prendergast et al. (1974).

Witte and Witte (1975) studied the differences between self-descriptions of the actual self and ideal self by 222 German male adolescents (16 - 18 years of age) as a function of their socio-economic status. They reported, using Cattell's 16 P-F Test, that differences between actual and ideal selves were significantly greater for the higher social class than for the lower social class. Ratings for the actual self were similar across social strata, while ideal self ratings were dissimilar: actual self ratings differed more between social strata in the emotionality sphere than in the extroversion sphere, and adolescents from higher social class described themselves as more radical than those from lower social class.

Haller et al. (1962) also used Cattell's 16 P-F to test the hypothesis that personality factors are correlated with socio-economic status (SES). They found very low correlation coefficients ($r = .11 - .18$ except for intelligence which was $.41$) for eight of the 16 personality factors, but they were statistically significant to differentiate between high SES and low SES: the high SES tended to be associated with such personality factors as intelligence, emotional stability, character or super-ego strength, adventurous autonomic resilience, will control and character stability, lack of nervous tension,

sophistication and cyclothymia. Although they concluded that the correlation between SES and personality was too low to generalize, their findings generally supported the notion that individuals from upper class backgrounds generally have a more positive self image than those from low class backgrounds (Prendergast et al., 1974).

Using male students in two large high schools, Rosen (1956) tested the propositions that social classes differ in the strength of the achievement motivated behaviour. The results clearly indicated that youngsters from the upper class had higher need achievement scores than the lower class youngsters. Similarly, Hara (1972) reported the social class differences in the self concept of ability among Japanese and American 9th graders aged 14 - 15. The upper class pupils described themselves as having a higher self concept of ability (SCA) than the middle class pupils whose SCA in turn, was higher than that of the lower class pupils. The same relationship was found with respect to values : a higher proportion of people in the upper class groups indicated that they were future-oriented, individualistic, action oriented (Rosen, 1956).

Rosenberg (1965) reported the relationship of social class to self values using a 44-item Self Values. Among high school boys, the results indicated that the higher the social class, the more likely is the boy to be concerned with intellectual values such items as "a good student in school", "intelligent", "a logical, a reasonable type of person", "imaginative and original" and "well-respected by others". In contrast to the boys, the self values of girls

in the social classes were strikingly similar. However, though not statistically significant, there were certain differences in the self-values of upper class and lower class girls : as with the upper class boys, the upper class girls tended to place greater stress on intellectual values and firmness of principle and tact, whereas the lower class girls showed a somewhat greater tendency to emphasize the tender virtues such as "sympathetic", "understanding", "kind", "considerate" and "religiosity".

Using American adults, Rokeach (1969) found that 20 of the 36 values (18 terminal and 18 instrumental values) in his Value Surveys had statistically significant differences related to differences in income : as for the terminal values, the poor valued "salvation", "a comfortable life" and "true friendship" more than the rich. Conversely, the poor placed a lower value than the rich on "a sense of accomplishment", "family security", "inner harmony", "mature love" and "wisdom". As for the instrumental values, the poor ranked more highly than the rich on such moral values as "clean", "forgiving", "helpful", "obedient" and "polite", but ranked competence values such as "capable", "imaginative", "intellectual", "logical" and "responsible" lower than the rich.

Very similar results were found in a study by Feather (1975) who administered Rokeach's Value Survey to two Australian samples in 1972 (N=147) and 1973 (N=241). In both years, higher income groups were associated with more importance assigned to "a sense of accomplishment", "mature love", being "logical", "capable", "intellectual",

"imaginative" and "self-controlled", while low income groups were associated with greater importance assigned to "a comfortable life", "salvation", "true friendship", "being clean", "helpful", "obedient" and "forgiving".

These similarities crossing national boundaries suggest that the poor may encounter similar socialization experiences wherever they are at least in Western societies, and so may the rich.

In summary, there is little previous work specifically relevant to the relationship between self concept and social class, and other informative studies are also not in agreement. However, there is some corroborative evidence which can be summarized as follows:

- 1) As an over-all pattern, individuals from higher classes are more likely than those from lower classes to have high self-esteem (or more positive self image), but the differences are not large.

- 2) Individuals from lower social classes are found to have somewhat morally and socially oriented self concepts which can be expressed in such terms as friendly, warm, cooperative, considerate, forgiving, obedient, clean, religious and polite, whereas those from higher classes are found to have somewhat achievement-competence oriented self concepts showing such attributes as being intelligent, ambitious, assertive, aggressive, active, capable, imaginative, logical, responsible, capable of leadership and achieving.

This pattern of differences distinguishing the upper class from the lower class is highly similar to the patterns that distinguish the non-believers from the Christian. This may indicate that social class is the basis of the self

concept differences found between the Christian and the non-believers. In general, more believers in religion (particularly Catholics) have been found to come from lower socio-economic levels than non-believers (Symington, 1935; Vernon, 1955; Fay, 1968; Mol and Reidy, 1973).

IV. AGE DIFFERENCES AND SELF CONCEPT

It is generally believed that an individual's concept of himself achieves a rather high degree of organization during the course of development and comes to resist change once self differentiation and self definition have taken place. Although it has not been clearly known by what age the process of self definition reaches stability, there is also agreement among researchers that the self has a generally stable quality which is characterized by harmony and orderliness. Purkey (1970) described the self from this point of view as "ultraconservative", Lecky (1945) reported that the self resists change and strives for consistency. Taylor (1955) also found that self concept is highly consistent over various time intervals and is not affected much by temporary moods and states of feelings.

The major empirical work in this area is still that of Engel (1959) who concluded that self concept becomes more integrated with age and is relatively stable among the high school students (8th and 10th, and 10th and 12th grades) over a two-year period. Stability was defined by relatively high correlations between the two self concepts Q-sorts administered in 1954 and in 1956. She obtained the over-all mean correlation of .53 between the two self concepts for

all subjects which was relatively high compared with a test-retest reliability coefficient (.68) over a ten day interval. From this finding, she reasoned that self concept was stabilized before the eighth grade (approximately up to 14 years of age). However, her reasoning seems to be inadequate since the correlation coefficient she obtained is statistically weak and hence its reliability is questionable. It was also found that there was a general increase in the positive tone of the self concept over a two-year span (particularly for the 10th and 12th grade subjects), indicating that a steady and more positive self concept is characteristic as individuals pass through adolescence into young adulthood. In comparing the self concept of boys and girls, she hypothesized that the self concept of boys would be significantly more stable than that of girls, on the assumption that cultural ambiguities concerning sex roles should be more likely to affect girls than boys. But this hypothesis was not verified.

Engel's findings generally are in the same line with those of Taylor (1955) who used the same Q-sort techniques, but the different time intervals (from half a day to seven months) and college students including some adults instead of high school students. For all time intervals employed, he found that the self concept tends to become more positive and more consistent, and its relationship to the ideal self becomes more positive.

In a longitudinal study over a 6 year period, Carlson (1965) examined more differentiated conceptions of stability and change in the self concept than those of Engel's (1959) and Taylor's (1955) studies. Two measures were derived from

parallel forms of a self-descriptive questionnaire : social vs personal orientation as the two different aspects of the self concept, and self esteem based upon the congruence between self and ideal self descriptions. As predicted, developmental sex differences in social-personal orientation were clearly supported : over the 6 year period from 6th graders to high school seniors, girls showed a greater increase in social orientation, while boys increased more in personal orientation, reflecting the different processes of self concept development for adolescent boys and girls. However, there were no sex differences in either the level or stability of self-esteem : median self-esteem scores for boys and girls were identical at both preadolescent (6th graders) and adolescent (high school seniors) levels.

Despite the differences in method, Carlson's findings with regard to self-esteem were consistent with Engel's earlier data, suggesting that self-esteem is a relatively stable dimension of the self, and one which is independent of sex role.

However, in a cross-sectional research with younger children (4th, 6th, 8th, and 10th graders), Bohan (1973) obtained evidence that 10th grade girls had significantly lower self concept scores measured on the Coopersmith Self Esteem Inventory than that of any other age groups. Among boys 6th graders had the highest self concept scores, followed by 10th, 8th and 4th graders. However, the differences between any two age groups were not statistically significant.

Bohan's findings were in conflict with those of both Engel (1959) and Taylor (1955) who found an increase in self concept with age, and with those of Piers and Harris (1964b), in which 3rd and 10th grade subjects rather than 6th graders, had higher self concept scores on a wide range self concept questionnaire, and although the 3rd graders scored higher than the 10th graders their scores are not significantly different. However, Bohan's findings partly corresponded with those of Katz and Zigler (1967) which indicated a lower self concept for adolescents (11th and 8th graders) than for younger subjects (5th graders) measured on a 20-statement questionnaire and a 20-item adjective check list.

The differences in methodology appears to be in part responsible for these apparently conflicting results. However, it can be summarized that longitudinal research seems to indicate an increase in the positive tone of concept over time : cross-sectional research, while showing age differences, leaves the pattern of developmental changes unclear. These conflicting results also offer a further warning that sex differences must be considered in conceptualizing the development and dynamics of self concept.

Although only a few developmental studies are reported in the literature, several studies were concerned with self-ideal self congruence in relation to the development of a self concept or maturity. In these studies, the congruence or discrepancy between the individual's real self concept and ideal self concept was used as an index of change or stability in self concept. The self-ideal self congruence was simply measured by subtracting real self ratings from

ideal self ratings.

At least two different interpretations of this self-ideal self congruence have been advanced. The most widely noted position is that of Rogers and his coworkers (Rogers, 1951; Dymond, 1953; Rogers and Dymond, 1954; Butler and Haigh, 1954) and many others (e.g. Raimy, 1948; Horney, 1950; Maslow, 1970; Turner and Vanderlippe, 1958; more recently Doyle, 1976) who have viewed the relatively congruent relation between one's self concept and ideal self concept as a general indicator for a person's psychological health. Rogers (1951), in his famous book *Client-centered Therapy*, mentioned it in relation to psychotherapy:

"....the result of therapy would appear to be a greater congruence between self and ideal. The self and the values it holds are no longer disparate. (The client) slowly discovers that what he wishes to be has shifted to a point where it is an achievable goal, and that actually he is himself changed to a degree which brings him much more in accord with his ideal". (Pl42)

This statement implies that self and ideal self are organizationally similar in healthy functioning persons. In a study reviewed above, Taylor (1955) found the same general trend among normal college students that has been reported for successful counselling : repeated description of the self and ideal self over various time intervals (up to 7 months) is usually accompanied by increased congruence between the two selves. However, the magnitude of change was smaller than that reported for persons in therapy.

Perkins (1958) also postulated, in his study dealing with 4th and 6th grade elementary school children, that increase in self-ideal self congruence facilitates self

development and is evidence of the improved self adjustment of the individual. Change in self concept was defined as change in congruence of the child's self concept and his ideal self, and data were obtained by means of a Q-sort with 50 self referent statements. He found that 1) the self concepts and ideal selves became increasingly and significantly more congruent ($P < .05$) through time (December to May), 2) the self-ideal self congruence of girls generally were significantly greater ($P < .01$) than that of boys, and 3) sixth grade children showed significantly greater ($P < .01$) self-ideal self congruence than did children in the fourth grade. With regard to sex differences in self-ideal self congruency, however, Jervis (1959) reported slight but significantly larger ($P < .05$) discrepancies among college women ($N=294$) than among college men ($N=556$). According to Perkins (1958), these differences are possibly accounted for in terms of the level of physical maturity : girls generally are ahead of boys in physical maturity until the end of pubescence, but by the time they enter university, boys finally catch up with the girls.

The other position was advanced by Zigler and his co-workers (e.g., Zigler and Phillips, 1960; Achenbach and Zigler, 1963; Katz and Zigler, 1967) who employed developmental theory to generate the prediction that self-ideal self discrepancy is related to the individual's level of maturity in the direction opposite to that of the Rogerian theory : the more mature the individual, the greater the discrepancy. Thus the magnitude of the discrepancy is not related to the level of the individual's psychological adjustment.

The developmental rationale underlying this prediction was based on two factors as follows (Achenbach and Zigler, 1963):

1) The higher the maturity level, the greater the individual's capacity for incorporating social demands, mores and values. The high developmental person, then, makes greater self demands, is more often unable to fulfill them and, consequently experiences more guilt than the low developmental person.

2) In any cognition, the more mature individual should employ more categories and make finer distinctions within each category than a less mature individual. This greater differentiating ability should result in a greater likelihood for discrepancy between his real self and ideal self.

Support for this view, which can be included in the present literature review, is found in a study by Katz and Zigler (1967) who administered two different instruments - a questionnaire composed of 20 statements and a 20 - item adjective list to 5th, 8th and 11th elementary school children. They found, on both instruments, 1) consistently lower real self scores than ideal self scores at all grades, 2) more negative real self scores and more positive ideal self scores with increasing age, and 3) thus, an increase in real self - ideal self discrepancy with age.

As reviewed above, studies of self-ideal self congruence render only a global measure of this congruence, but yield little information concerning the importance of self or ideal self items or their qualitative nature. Therefore it is unlikely that conflicting results are

reconciled by self - ideal self correlations alone.

Studies of change in self concept of university students seem to be non-existent in the literature; the only exception is the Taylor study (1955), but the time intervals employed were relatively short. (The maximum interval was a seven-month). This lack of data on change in self concept is surprising in the light of the weight given to this personality construct by psychologists and many others. However, studies which have examined change over the university period, predominantly involve comparisons of personality and values.

Although there were studies on personality changes of students during the university years (e.g., Farnsworth, 1937; Kuhlen, 1941), the first extensive study of the effects of university experience on personality seems to have been that of Newcomb (1943). From the comparison of the freshmen and seniors in Bennington College, he concluded that college experience had produced a shift from political and economic conservatism toward a liberal position.

Many longitudinal and cross-sectional studies have also reported results similar to those of Newcomb. Sanford (1956a, 1956b) and his associates (Freedman, 1956; Webster, 1956, 1958; Webster et al., 1962) used a wide variety of tests such as the California Psychological Inventory (CPI), the Berkeley Public Opinion Study, the MMPI, the Social Maturity Scale, the Impulse Expression Scale, the Developmental scale, in addition to periodic interviews of subjects as they proceeded through college. Significant changes in personality characteristics were found in their study carried

out at the Vassar College and at a variety of women's colleges in the United States. In comparison with freshmen, seniors were less authoritarian, less conventional, less ethnocentric, but more tolerant and religiously more liberal. Seniors were more mature both in expression of impulse and in mechanisms of control. They also showed evidence of increased differentiation, discrimination and mastery. Freshmen, as compared with seniors, were in a phase resembling latency : the life of impulses was effectively checked by more or less primitive mechanisms of control. Seniors became less stereotypic in the perception of the sexes and of sex roles, but showed an increase in cultivated tastes and interests, and a tendency towards a more skeptical and critical disposition.

Garrison (1961) administered a scale of "worldmindedness" to groups of university students and compared the mean scores of freshmen, sophomores, juniors and seniors. A hierarchical order of means was obtained for both males and females with freshmen placing lowest and seniors highest in measured worldmindedness.

Lehmann (1963), in a four year longitudinal study at the Michigan State University, found a significant decrease in dogmatism from the freshmen to the senior years for both males and females. All these findings indicate that college or university experience affects attitude of students in the direction of liberalism in their political, social and religious outlooks.

Feldman and Newcomb (1969), in their comprehensive review of the literature, attempted to discover the various sorts of changes that occurred in students as a result of

their college experience. Their review indicated that freshmen-to-senior changes occurred in several characteristics with considerable uniformity across different colleges and universities. As reviewed above, the senior students were less authoritarian, less conservative, and less prejudiced, but were more sensitive to aesthetic experiences. They also showed increasing intellectual interests and capacities and a declining commitment to religion, especially in its more orthodox forms. There was a movement towards greater independence and more self-confidence, and an increased readiness to express their impulse. Some of these changes occurred more consistently than others but the overall picture was one of increasing openness to new experience and of increasing tolerance.

In an Australian study conducted at the University of Melbourne, Little (1970) interviewed a sample of third year students enrolled in Arts and Science Faculties. He found that students claimed to have become more aware of life, more competent in it, and more tolerant of others' opinions and behaviour as a result of their university experience. These shifts in general personal styles were more apparent, however, than shifts in particular attitudes or interests. Little (1970) did not interview a comparison group of first year students, but relied solely on the retrospective accounts of the third year students, in a highly structured interview supplemented by questionnaires at various points.

On the other hand, Plant (1965) has raised a question about the advisability of attributing the reported personality changes to the college experience. He found that other

comparison groups (subjects not in college) over a four-year period also showed a significant decrease in authoritarianism, dogmatism, and ethnocentrism in the same fashion as did students over their four years of college life. Plant's results suggest that the college experience may simply accelerate a change going on in young persons whether or not they actually attend college.

In another longitudinal study by Plant and Telford (1966), changes in student's personality, ideology or values associated with a two-year experience in a junior college were investigating in conjunction with non-college comparison groups. Using five scales (Sociability, Self-Control, Achievement via Independence, Intellectual Efficiency, and Responsibility) of the California Psychological Inventory (CPI), the Rokeach Dogmatism scale, and the Allport, Vernon and Lindzey study of values, they found that:

- 1) Changes in the five scales of the CPI over the two-year period were found to be, without exception, in the direction of increased Sociability, Self-Control, Achievement via Independence, Intellectual Efficiency and Responsibility among all subjects, i.e., subjects enrolled for three or four semesters (GROUP 1) during the two-year period, subjects enrolled for one or two semesters (GROUP 2) during the two year period and subjects of non-college groups (GROUP 3).

- 2) The males and the females of all three groups showed a significant decrease in Dogmatism scale over the two-year period, irrespective of educational attainment which measured authoritarianism, dogmatism and closed-mindedness of a general sort.

3) With the Study of Values, the test-retest results over the two-year period yielded the greatest number of significant mean changes for Group 1, the next highest frequency of reliable changes for Group 3 (non-college groups), and the smallest number of significant changes for the Group 2.

From these analyses, they concluded that many of the changes attributed by others to the college experience may be no more than developmental changes underway in young adults irrespective of the amount of their educational experience.

Similar results were found in a study of value changes by Feather (1973) with Australian subjects. He administered the Rokeach Value Survey to students just entering Flinders University (1969) and again, 2½ years later (1971), to the same group of students who were then divided into three groups: those who remained at Flinders University, those who went to another tertiary institution, and those who quit tertiary studies. The results showed strong evidence of similarity between the groups in both years (1969 & 1971), and evidence of stability rather than change in average value systems over the 2½ years. In the case of 18 terminal values, all of the Spearman rhos were above .85, and in the case of 18 instrumental values all of the Spearman rhos were above .72. The analysis of variance indicated that values concerned with affectionate personal relationships (loving, mature love, forgiving), with aesthetic experiences (a world of beauty) and with being intellectual were significantly increased ($P < .01$) in relative importance over the 2½ year interval for all three groups. In contrast

values concerned with competitive striving, with orthodox religion, with rules of conduct related to status or authority, and with control and self discipline were significantly decreased ($P < .01$) in relative importance over the 2½ year interval for all three groups.

These findings with Australian subjects were consistent with those found in the American university or college students. But it should be noted that these changes in value importance occurred not only among those who remained at university, but also among those who left university. Therefore these changes were general ones, not confined to university students only, but occurring in general among young people of this age. In this sense, Feather's findings were in line with those of Plant (1965) as well as Plant and Telford (1966).

In summary, although the findings, to a large extent, are not comparable because of the variability in experimental design, types of subject and particularly terminology used, some credence in a relationship between age differences and the self concept can be roughly justified as follows:

- 1) Self concept generally has a stable quality and becomes better integrated, and more resistant to change with increasing age.

- 2) Among primary and secondary school children, there seems to be no consistent age differences in their self concepts. However, longitudinal research revealed a positively increased self concept over time, whereas cross-sectional research showed an unclear pattern of developmental changes in self concept.

3) Some studies indicated the importance of sex differences, particularly during the high school period, in conceptualizing the development of the self concept.

4) When the congruence between real self and ideal self was used as an index of change in self concept, two different interpretations were found: those who follow the Rogerian self theory believe that self and ideal self are organizationally similar in healthy functioning persons and that increased congruence between the two selves is generally accompanied by increasing age. The other group, on the other hand, believes that self-ideal self congruence is related to the individual's level of maturity in the direction opposite to that of the Rogerian theory: a greater discrepancy can be found in the more mature (older) than in the less mature (younger) individuals, due to their greater self demands, greater differentiating ability and consequently more guilt experiences.

5) During the university period, students become less authoritarian, less conservative, less prejudiced, more tolerant, more worldminded, more flexible in sex roles, more critical, more sensitive to aesthetic experiences, more independent, more self-confident, more sociable, more realistic, more competent and more responsible. They also showed increasing intellectual interests, but a declining commitment to religion in its orthodox forms. However, there is evidence that these changes commonly attributed to the university experience were found among non-university groups of a similar age range. These changes as Plant (1965) and Plant and Telford (1966) suggested, may be no more than developmental changes underway in young adults whether or not

they attend university.

V. TIME PERSPECTIVE AND SELF CONCEPT

As Wallace and Rabin (1960) stated, time perspective involves the total personality, memory for past events, as well as hopes, aspirations and anticipations of future events. Thus it would appear that an individual's projection of his self in the temporal dimension as part of the uniqueness of personality is of major interest in the study of time perspective.

There are many studies reported in the literature on time perspective, but often investigators have been mainly concerned with its future dimension. Furthermore "its proper definition and method of measurement is unsettled" (Black, 1969). For example the terms "time perspective", "time perception" and "time orientation", as Wallace and Rabin (1960) and Kastenbaum (1961) pointed out, are used interchangeably as in the studies by LeShan (1952), Barndt and Johnson (1955), Cottle et al. (1969) and Bonier and Rokeach (1957). Consequently, it is often difficult to know precisely what is being considered in a given study.

Sattler (1964) simply said that time perspective is a basic attitude of an individual which reflects a general orientation of life. Lewin (1951) defined time perspective as "the totality of an individual's views of his psychological past and psychological future existing at a given time".

More detailed definitions are those of Hoornaert (1975) and Blatt and Quinlan (1967).

Hoornaert (1975) defined time perspective as the perspective which exists and is continually elaborated, more or less consciously, by the reciprocal influence of global viewpoints on the past, present and future. It occurs as a function of actual needs and value orientations and manifests itself in all aspects of behaviour.

Blatt and Quinlan (1967) defined it as the capacity to relate current experiences to a historical past and to an anticipation of the future. They further stated that time perspective as a psychological parameter has a prospective and a retrospective dimension, but it is particularly the prospective span which is essential for purposeful, goal-directed behaviour.

To avoid conceptual confusion, Kastenbaum (1961) argued that any departure from a unified conception of time perspective should lead to differential associations between specific dimensions of time perspective and personality attributes. As a guiding model of future time perspective (FTP), he proposed four dimensions : (a) how far ahead does he extend his thought? (Extension), (b) how densely populated does the future appear to him? (Density), (c) how well organized or coherent is his outlook? (Coherence) and (d) to what extent does he think of himself as moving forward from the present movement into the future? The extension and coherence dimensions were originally formulated by Wallace (1956) and the other two were introduced by Kastenbaum (1961). But in a test of the model, he found that extension, coherence, and density shared a common factor. This suggested, in his words, that "previous formulations and experiments

had a core of credibility in their assumption that there exists a rather generalized concern for future events and experiences" (P213). But the sense of moving forward into the future (Directionality) was found to be relatively independent of the other three dimensions.

Unfortunately the earlier studies did not give much attention to the problem of directionality per se. As far as the present author has surveyed in the literature, Kastenbaum is the only person who has stressed this dimension of time perspective, although the term "directionality" was implicit in the work of Knapp and Garbutt (1958) in connection with the need for achievement.

Kastenbaum (1965) raised three questions as a set of elementary problems concerning the directionality of time perspective. One of them would appear to be closely related to the present study in which the author explored the general direction of subjective anticipation in changes of positive self attributes among young adults. The question was: "Is there a marked preference for future directionality in general?" In answer to this question, he stated:

"There is so little empirical and theoretical background for this problem.... (but) there is a rather compelling common-sense notion that 'life moves ahead', a biological view that scanning the future is a constant, survival function of the organism and the ready observation that the hands of the clock move in one direction only".
(P 193-194)

These circumstantial considerations suggest that at any given moment, a normal person's time perspective can be characterized as directed more toward the future than toward the past. In his (Kastenbaum, 1965) empirical study of 104 senior high school students (M=62, F=42), this notion

was strongly supported. The difference between frequency of future and past conceptualization for the 12 item story completion test was significant at the .001 level of confidence, but no sex differences in time directionality were found.

Another empirical study (Lee, 1974) demonstrated a marked preference for future orientation among people. Lee administered semantic differential scales measuring attitudes toward past, present and future to 724 Chinese of both sexes aged 16 - 68 including native Taiwanese and continental children. Results showed that the subjects' attitude toward the future was the most positive one. It was also found that young people had a more positive attitude toward the future and less positive attitude toward the past than older subjects.

Mezei's (1974) findings are also in the same line with those of Kastenbaum and Lee. From the modified TAT data produced by 13 groups of students aged 11 - 19, the most consistent finding was that in all groups the rank order of evaluations tended to rate the future the best, followed by the present, while the past was rated the worst.

Lewin (1948) also mentioned that a person is likely to be future-oriented if he feels that highly valued goal is accessible to him. This orientation toward the future is acquired by incidental learning during childhood and adolescence. Fraisse (1963) said that "our life in the present is normally oriented toward the future which gives us a purpose to our actions". Allport (1961) emphasized that the tendency of human personality goes beyond steady states and elaborates

its internal order. This conception allows for a continual increase of men's purposes in life. He further quoted a German writer Von Herder as saying: "Man is never complete : his existence lies in becoming". Frankl (cited by Tweedie, 1972) also characterized a person in a way that he is not a static substance, but is rather an unfolding, active existence : man is ever a process of becoming. Therefore it would appear that temporal orientation is closely associated with subjective anticipation in changes of positive self concepts.

Furthermore, not only is it possible to postulate a link between subjective anticipation in changes of positive self concepts and temporal orientation, but it also seems reasonable to expect a close relationship between subjective anticipation in changes of positive self concepts and achievement motivation which has been found to be strongly related to temporal orientation by many scholars.

Kastenbaum (1961), in an earlier study of 209 senior high school students (107 males, 102 females), found that the need for achievement was closely related to the sense of moving forward into the future. But again there was no indication of appreciable sex differences. Green and Knapp (1959) also demonstrated a close relationship between the need for achievement and future orientation in the sense of moving from the present to the future, rather than a conceptual elaboration of the future. These findings indicated that an emphasis on achievement is associated with a generalized preoccupation with the future.

In his discussion of the achievement motive, McClelland (1961) mentioned that anticipation of future goals, scheduling

and other such concerns with the management of time are closely associated with high achievement motivation. In an empirical study of 73 male undergraduates with four TAT pictures and the Time Metaphors Test, Knapp and Garbutt (1958) found a strong positive correlation between the preference for directionality (future orientation) and the strength of the need to achieve. In the opinion of Knapp and Garbutt, the essential difference between those with a high achievement need and those with a low achievement need resides in the presence or absence of a preference for future-oriented movement.

Teahan (1958) found from a population of 7th and 8th grade boys that 30 high achievers when compared to 30 low achievers made a greater number of future references ($P \leq .003$) on the Eson 25 Topics Test. The high achievers, with the Barndt and Johnson (1955) Structured Story Completion Stem, had also significantly greater future extension ($P \leq .02$) than the low achievers.

Barabasz's (1970) study using university subjects also showed a strong positive relationship between temporal orientation and academic achievement, indicating that low academic achievers were more constricted in temporal orientation than high academic achievers. In order to determine temporal orientation, he used three photographic portraits from which stories were elicited by the subjects.

There has also been the common observation suggesting that time perspective is one of the important variables in the field of developmental psychology (Pressey and Kuhlen, 1957). Lewin (1946) theorized that the maturation process involves an enlargement of the individual's time perspective

so that greater spans of both past and future time are integrated into the psychological present. Friedman (1944) found that children seem to think more logically about the past than about the future, while Wesley (1942) and Oakden and Sturt (1922) found that before the age of 11, a child is incapable of a historical sense of time, but arrived at the adult level of understanding at age 13. Kastenbaum (1961) believed that the study of time perspective is a valuable approach to understanding individual development.

Black (1969) also argued that one of the features of maturity is the development of a striving after future goals. This requires the conceptualizing of a greater future time span by the developing person. Schenberg (1973) found a significant positive correlation between ego-development and time perspective. Allport (1955) also stated that the possession of long-range goals distinguishes the adult from the child.

However, attempts to provide empirical support for the widely accepted theoretical hypothesis that Future Time Perspective lengthens with maturation have produced most disappointingly inconsistent results. Although Davids and Parenti (1958), using a Story Completion Test, found a shorter FTP in their 11-year-old boys ($N=55$) than in 17-year-old boys ($N=26$) in a study by Barndt and Johnsons (1955) who used the identical instrument, many studies have reported no significant relationship between age and FTP.

Smart (1968) found no significant correlation ($r = -.20$, $P > .05$) between age and future extension on the Wallace 10 Future Events Test in a group of 33 adults. Roos and Albers (1965a) also found no significant correlation between

chronological age and future extension among 27 adults (5 males and 22 females). They used the Time Reference Inventory. With 120 elementary school children from grades 2 to 8 who were equally divided into the two sex groups, Brock and Del Giudice (1963) demonstrated no significant relationships between age and Future Time Perspective, or between sex and FTP. Levine et al. (1959) were also unable to demonstrate a significant relationship between age and FTP with 47 emotionally disturbed children ranging in age 11 to 19.

Furthermore recent findings by Webb and Mayers (1974) sharply contrasted particularly with the results of Davids and Parenti (1958). They administered the Time Reference Inventory (which measures Future Extension, Past Extension and a single overall orientation combining Past and Future Extensions) to 20 males and 20 females from each of the 5th (ages 9 - 10), 8th (ages 12 - 13), and 11th (ages 15 - 16) grades and college freshmen (ages 18 - 19) groups. The results showed that the four age groups differed significantly for both sexes for the variable of Future Extension (males $P < .01$, females $P < .001$) and the overall time orientation (both sexes $P < .001$): two younger groups projected their thoughts farther into the future, whereas the older groups were much more concerned with the present. Nevertheless, no significant differences were found for Past Extension across the age groups. It was also found that sex differences in temporal orientation were minimal at different age levels and were significant only in the 8th graders.

These findings supported a study by Foulks and Webb (1970) in the sense that Future Extension is a particularly

sensitive and reliable variable and that persons vary more on this variable than on the variable of Past Extension.

Klineberg (1967), using 24 children (aged 10.5 to 12.5) and 22 adolescents (aged 13.5 to 16.5), also showed findings similar to those of Webb and Mayers (1974).

In his study, adolescents listed a greater proportion of present events (46.7%) and a smaller proportion (33%) of references to future events among the 10 things which they reported having recently thought or spoken about, whereas children listed a smaller proportion of present events (18.6%) and a greater proportion (60%) of future events. Differences between the two groups in both proportions of present and future were statistically significant at the level of .001. But the difference in the proportion of past events (children = 18%, adolescent = 15%) was not significant.

The findings by Lessing (1968) also provided strong evidence against a developmental trend in length of FTP. With a total of 746 fifth, eighth and eleventh graders obtained from 12 schools in Chicago, he examined the developmental hypothesis that the length of FTP increases from childhood to late adolescence. On the 10 Events Test and the Incomplete Sentences Test, he found, contrary to his expectation, a significant decrease ($P < .01$ on both tests) in length of FTP over grade levels.

These findings and the results obtained by Webb and Mayers (1974) and Klineberg (1967) seem to indicate, as Lessing concluded, that images of the future are available for the projection of wish-fulfilling fantasies in childhood, but become increasingly constrained by realistic considerations

during adolescence and young adulthood. These findings are highly consistent with Lewin's (1946) description of increased differentiation along the reality - irreality dimension as a function of age.

Studies in sex differences in time perspective have also shown variations in their pattern.

As reported above, Webb and Mayers (1974), Kastenbaum (1961, 1965) and Brock and Del Giudice (1963) demonstrated no sex differences in temporal orientation. Roos and Albers (1965b) also found no significant sex differences on the Time Reference Inventory with 77 normal subjects. Another study by Judson and Tuttle (1966) showed no sex differences among 82 sixth graders on a story completion technique.

But Lehr (1967), with a sample of 100 middle class adults (aged 60 - 65), found that men were more positively oriented than women toward the future. Similar to this were findings by Albers (1965) who administered the Time Reference Inventory to two samples of college undergraduates : for men, past and future were positive functions of their age whereas for women this was not so. Lessing (1968) also found, in his study of 746 fifth-, eighth- and eleventh-graders, that males manifested a longer future time perspective than females on the 10 Future Events Test ($P < .01$) and the Incomplete Sentences Test ($P < .01$). But no significant sex differences were found on the Story Completion Test. On the other hand, in a recent study by Mattis (1973), a significant sex difference favouring females was found on future time perspective as measured by the Story Completion Test. The sample was 219 university freshmen (110 males and 109 females).

Such a wide variety in research findings on sex differences seems to indicate that time perspective differs according to the instrument used to measure it, and further suggests that it may not be a unitary personality variable.

Pressey and Kuhlen (1957) suggested that, as Black (1969) quoted, "sensitivity to the variable of time perspective varies a great deal from one social level to another". Wallace and Rabin (1960), in their extensive review of the literature on time perspective, also summarized that "the relationship of the personal experience and events to conventional units of time is learned and depends upon the cultural setting from which a person originates". Mischel (1961) argued that a major difference between middle-class and working-class is the latter's inability to delay gratification and hence transform present activities into preparations for some later time.

Although various theories have been advanced to explain social class differences in temporal perspectives, as O'Rand and Ellis (1974) pointed out, "our state of knowledge is still in its formative stage" (P 53).

Several writers proposed a middle class future orientation and a lower class present orientation. For example, Leshan (1952) reported evidence of class differences in time extension among 117 children aged 8 - 10 as measured on a Tell-Me-A-Story technique. The evidence showed that middle class children (N=43) had a significantly more extended time sense than lower class children (N=74).

Lessing (1968) also reported significant ($P < .05$) class differences in length of FTP with the Story Completion Test

among elementary and high school children, but with the 10 Events Test and the Incomplete Sentences Test, significant class differences were not produced, although middle class children showed higher mean scores of length of FTP than working-class children on both tests.

O'Rand and Ellis (1974) were able to support LeShan's findings in their study comparing 120 Job Corpsmen with lower class background and 80 male university freshmen with middle class background. The findings revealed that lower class subjects had a significantly more circumscribed notion of future time than middle class subjects, and their outlook on the future was less systematically ordered. They used a 7-events listing technique which was originally developed by Wallace (1956) and later modified by Vincent (1965).

Yet Freeman (1964, cited by Lessing, 1968) failed to obtain class differences in length of FTP as evaluated from TAT stories produced by adolescent girls. Greene and Roberts (1961) also questioned LeShan's findings and pointed out, using LeShan's data that there was no statistically significant difference between the two groups. Furthermore, Judson and Tuttle (1966) also failed to support LeShan's findings. They administered a story completion test and an objective measure of time perspective (unspecified) to 40 middle class and 42 lower class children classified on the basis of residence and father's occupation : the two groups showed no significant difference on either of the two measures. However, they said that this result might be influenced by the inadequacy of the techniques they employed.

In summary:

- 1) Time perspective, as a basic attitude of an individual, reflects a general orientation of life. It is

regarded as a fairly broad, reasonably unitary variable which is closely associated with subjective anticipation in changes of self concepts.

2) It is generally accepted that a normal person's temporal orientation can be characterized as directed toward the future. This notion has been supported by many theoretical and empirical studies.

3) The sense of moving forward into the future is closely related to achievement motivation. In other words, an emphasis on achievement is associated with a generalized preoccupation with the future.

4) Thus a person's temporal orientation, subjective anticipation in changes of self concept, and achievement motivation are likely to be inter-related.

5) It is generally agreed that the maturation process involves an enlargement of the individual's time perspective (Extension dimension), so that greater span of both past and future is integrated into the psychological present. However, empirical studies have shown that when children reach the adult level of sense of time, they tend to project themselves farther into the future than do adolescents and young adults. This can be explained with Lewin's description of the increased differentiation along the reality - irreality dimension during this period of life : a primary difference between the child and the young adult is the relative lack of differentiation in the child's thought between unattainable wishes and realizable expectations.

6) With regard to past time perspective, there seems to be no significant difference across the different age levels

during adolescence and young adulthood.

7) As to sex differences and social class differences in time perspective, it is virtually impossible to make any generalization upon the empirical results, despite numerous significant findings, because of the variety or lack of definitions of time perspective given, because of the differing methodologies employed and because of the variety of subjects used (Wallace and Rabin, 1960).

8) Finally, it seems reasonable to conclude from the theoretical and empirical studies reported in this section as follows:

(i) The pattern of subjective changes in self concept is characterized by an increasing positiveness in the subject's response from that of the past self concept to that of the future self concept.

(ii) The younger the young adult, the more changes they would anticipate in their positive self concepts in relation to the future, but there is no difference in the past self concepts between the different age levels of young adults.

(iii) It is uncertain whether sex difference and social class difference exist in the pattern of subjective anticipation in changes of self concept.

VI. FACTOR ANALYTIC STUDIES OF SELF CONCEPT.

Parker and Veldman (1969) administered Gough and Heilbrun's Adjective Check List (ACL) to 2,212 female and 2,805 male freshmen at the University of Texas. The ACL containing 300 adjectives, involves asking subjects to check the items that they consider to be self descriptive. Data from male

and female subjects were analyzed separately as well as in combined form. Phi coefficients were generated and seven principal axis factors were rotated by means of the Varimax method. The results showed that the factor structure was remarkably invariant between males and females. The following seven factors, based on the data from the combined groups of 5,017 students, were interpreted:

1) "Social Facilitation" was described as having much social favourability. Included in this factor were twenty-eight adjectives such as pleasant, kind, warm, cheerful, helpful, sociable and good-natured.

2) "Interpersonal Abrasiveness" was defined by nine adjectives such as rude, lazy and obnoxious.

3) "Ego Organization" was defined by twenty adjectives such as industrious, logical, thorough, efficient, organized, initiative, rational and stable.

4) "Introversion - Extroversion" had high positive loadings on such adjectives as quiet, shy and timid, but high negative loadings on the adjectives talkative, outgoing and loud.

5) "Internal Discomfort" was defined by 14 adjectives such as emotional, nervous, worrying and tense.

6) "Intracception" was defined primarily by three adjectives; reflective, unconventional and idealistic.

7) "Social Attractiveness" was defined by ten adjectives such as charming, handsome, good-looking and sophisticated.

The investigators, in a subsequent study (Veldman and Parker, 1970), developed a modified form of the ACL which

contained the eight items loading highest on each of the above seven factors. Subjects rated themselves on a five-point scale on each of the items. They administered this modified instrument to 713 female students enrolled in a junior level psychology class. After analyzing the data, the authors concluded that the results confirmed the integrity of the seven major traits of self-description obtained from the full ACL.

McIntire and Drummond (1976) examined the factor structure of two self concept measures commonly used with elementary school age children, the Coopersmith Self-Esteem Inventory (CSEI) and the Self Concept and Motivation Inventory (SCAMIN). The CSEI is a self-report test consisting of 58 items. Each item assesses whether a certain attitude or characteristic is "like me" or "unlike me" as the child perceives himself. There are five subscales on the CSEI: General Self, Social Self, Home - Parent, School Self and a Lie Scale. The SCAMIN which purports to measure self concept in relation to school, has four subscales: Achievement Needs, Achievement Investment, Role Expectancy, and Self-adequacy. The first two subscales are combined to yield an achievement motivation score and the last two to yield a total self-concept score.

The CSEI and the SCAMIN were administered to 126 second grade and to 237 fourth grade elementary pupils. A principal components factor analysis with a varimax rotated factor matrix was computed at each grade level. The results showed no grade level differences in factor structure. The three identifiable factors emerging at each grade level were readily matched and interpreted as reflecting essentially the same constructs:

1) "General Self" was defined by the General Self, Social Self, Home-Parents, and School Self Scales of the CSEI with factor loadings .52 or above at both grade levels.

2) "School Self" was labelled by the two SCAMIN self concept scales, Role Expectation and Self-Adequacy with loadings of .58 or higher for both grade levels.

3) "Motivational Self" was composed of Achievement Needs and Achievement Investment scales of the SCAMIN loading above .40 at both grade levels.

Kokenes (1974) also administered the CSEI to approximately 7600 public school children in grades 4 to 8 in two northern Illinois communities of the United States. Factor analyses were performed for each grade level using Thurstone's orthogonal rotation technique. She found that on the whole, there was little factorial difference in expressed self attitudes from grade level to grade level. Minor differences were; 1) sixth graders were more reflecting of themselves than were children in other grade levels, 2) eight graders were less rejecting of themselves than any of the other grade levels, 3) only fourth and sixth graders generated a factor describing poor parent-home relationships, 4) only seventh graders failed to generate a factor describing positive perception of school success, and 5) only fourth graders generated a factor expressing both positive and negative perceptions of school success. Four factors common to all grade levels were:

- 1) Perceived inadequacy of self.
- 2) Perceived adequacy of self.
- 3) Reflection of self.
- 4) Social self and peer success.

Kokenes concluded that the results of this study tended to provide empirical support for the constructs suggested by Coopersmith (1967); the factors emerged in this study were similar to the sources of self-esteem that Coopersmith described.

In a study by Richards (1966), 12,432 college freshmen (M= 6,289, F= 6,143) rated themselves on each of the thirty-one common personality traits on a four-point scale. Product moment correlations between the self rating items were computed separately for each sex. The two resulting 31 x 31 matrices were factor analyzed using principal components method and the Promax procedure for the oblique solution. He found no factor unique to one sex and seven factors common to both sexes. These were:

- 1) Physical well-being (athletic ability, physical energy and physical health);
- 2) Scholarship (mathematical ability, scholarship, scientific ability, and self-confidence-intellectual);
- 3) Estheticism (originality, artistic ability, speaking ability, writing ability, expressiveness and acting ability);
- 4) Pragmatism (self-control, independence, conservatism, practical-mindedness and perserverance);
- 5) Technical-scientific ability (mechanical ability, artistic ability, scientific ability and research ability);
- 6) Sociability (leadership, popularity with opposite sex, sociability, aggressiveness, cheerfulness, self-confidence, and popularity);
- 7) Sensitivity to others (understanding of others, sensitive to the needs of others, cheerfulness and sense of

humour).

A comprehensive study covering grades 3 to 12 was conducted by Gordon (1968) with his "How I See Myself Scale". Data obtained from 8,979 students were factor analyzed using the principal components method and a varimax rotation. A total of 12 factors, which varied from sex to sex and from grade to grade, were extraced, but there was a high degree of congruence between the factors for males and females at the senior high school grades. The factors included: 1) Teacher - School (both sexes); 2) Physical Appearance (both sexes); 3) Interpersonal Adequacy (females only); 4) Autonomy (both sexes); 5) Adademic Adequacy (both sexes); 6) Physical Adequacy (both sexes); 7) Emotions (both sexes); 8) Girls - Social (boys only); 9) Boys - Social (boys only); 10) Language Adequacy (boys only).

Gordon's findings may be compared to Richards' (1966) factors: the "Physical Adequacy" relates to the "Physical well-being" factor, the "Adademic Adequacy" to "Scholarship", "Autonomy" to "Estheticism", "Emotions" to "Pragmatism", and the "Interpersonal Adequacy" to "Sociability".

Of course, all factors on self-rating scales are functions of the original items placed on such scales. Nevertheless, the degree of overlap between the college freshmen factors suggested a considerable degree of organization and stability between the early college years and the late high school years in the dimensions young adults see as making up their images of themselves.

The Bem Sex-Role Inventory (BSRI), which conceptualizes masculinity and femininity as two independent dimensions

rather than using the traditional notion of a single bipolar dimension, was factor analyzed by Gaudreau (1977) using a principal-axis method and a varimax rotation. Scores obtained from the BSRI (which consists of a list of 60 adjectives) returned by 253 male and female industrial workers, 36 police officers and 36 non-working housewives produced four interpretable factors:

1) "Masculine" factor included 17 of the 20 masculine adjectives and two feminine adjectives weighted negatively such items as strong personality, assertive, forceful, leadership ability, dominant, ambitious, aggressive, competitive, independent, shy (-) and soft-spoken (-).

2) "Feminine" factor included 13 of the 20 feminine adjectives and 6 neutral adjectives, such as affectionate, sympathetic, compassionate, warm, tender, gentle, eager to soothe hurt feelings, understanding, helpful, sincere, friendly, happy and likeable.

3) "Sex of the subject" factor was composed of three items (feminine, masculine and athletic) each of which seemed to reflect the actual sex of the subject.

4) "Neutral maturity" factor included reliable, self-sufficient, self-reliant, sincere, flatterable, gullible, childlike and inefficient.

These results clearly differentiate between the two sexes and support, as the author of the inventory conceptualized, the notion that masculinity and femininity are more reasonably considered as independent traits rather than as a single bipolar dimension.

The Interpersonal Checklist (ICL) developed by Leary (1957) and his colleagues (La Forge and Suczek, 1955) contains

a set of eight personality dimensions called "octants" which presumably reflect important aspects of personality functioning. These octants scores are assumed to reflect two overall behavioural dispositions, "Dominance" and "Love" when combined in certain ways from rationally determined formulae. The standard form of the ICL consists of 128 words or phrases of the following type: "well thought of", "often gloomy", "cooperative", etc..

Briar and Bieri (1963) administered the ICL to 146 graduate social work students (104 females and 34 males) and 104 male members of the United States Army Reserve. A product moment intercorrelation matrix was computed and then analyzed using the principal components method with the varimax rotation. Three factors were extracted accounting for 62.5% of the total variance:

Factor I was most clearly defined by octants 3 (aggressive - sadistic), 2 (competitive - narcissistic) and 1 (managerial - autocratic) behaviour categories. The investigators suggested that this factor could appropriately be considered the "Dominance" factor hypothesized by Leary.

Factor II was clearly defined by octants 7 and 8, the cooperatives - overconventional, and responsible - hypernormal behaviour categories. This could be identified Leary's "Love" factor.

Factor III defined by octant 5, self-effacing and masochistic, was difficult to identify, so Briar and Bieri tentatively labeled it "inferiority feelings" and explained that to some extent, the third factor was the opposite of Factor I and appeared to reflect submissive trends.

These findings provided general support for Leary's hypothesis that the ICL consists of two principal dimensions, Dominance and Love. But the findings differ from Leary's formulations primarily with regard to the octant used in his formulae for computing scores on these dimensions.

The Bills Index of Adjustment and Values (IAV) measures self concept, acceptance of self, ideal self and corresponding measures for other people. Subjects are given a list of adjectives which they use in the six descriptions.

Mitchell (1962) administered the IAV to 147 female college students in a teacher preparation programme. The data obtained from 49 adjectives of the self concept section of the Index were factor analyzed by Thurston's centroid method and rotated by means of the Varimax Method. This resulted in the extraction of seven interpretable factors:

- 1) "Freedom from Anxiety" (with negative loadings for nervous and fearful, and positive loadings for calm, normal, stable, merry, optimistic, acceptable and mature).
- 2) "Motivation for Intellectual Achievement" (studious, intellectual, competitive, ambitious and responsible).
- 3) "Offensive Social Conduct" (stubborn, meddlesome, sarcastic, fault-finding, annoying and cruel).
- 4) "Social Poise and Self Confidence" (confidence, clever, poised, fashionable, charming, tactful and successful).
- 5) "Warm-hearted Attitude toward Others" (kind, considerate, helpful, friendly and sincere).
- 6) "Impersonal Efficiency" (business-like, logical, efficient, reasonable, economical and stable).

7) "Dependability" (dependable, teachable and responsible).

Mitchell's study dealt only with the self concept portion of the instrument, although other measures such as acceptance of self and ideal self are included on the instrument. Additionally, only females were included in the study so that differences in self concept factors between the sexes could not be determined.

In a comprehensive study by Finch (1973), item ratings obtained from each of the six scales of the IAV with 3,166 junior high school, senior high school and college students were factor analyzed by sex, school level and school type (public and parochial) using a principal axis method with Kaiser's varimax rotation. Of the six scales of the IAV, only self concept and ideal self sections will be reported here. The number of factors extracted in each analysis was from 5 to 17. Interpretations of factors was based on a classificatory scheme of six categories: 1) factors that could be named, 2) meaningful but unnamable factors, 3) complex factors for which meaning was not discerned, 4) factors in which no relationship between the variables could be determined, 5) factors composed of only a small number of apparently unrelated variables and 6) factors on which only one variable had its highest loading.

Some examples of named factors commonly found in both self concept and ideal self section of the IAV are as follows:

Social Competence - (clever, charming, merry, intelligent, ambitious, competent, worthy, alert).

Offensive Social Conduct - (cruel, reckless, annoying, sarcastic, meddlesome, stubborn, fault-finding).

Warm-hearted Attitude toward others - (kind, considerate,

friendly, helpful).

Impersonal Efficiency - (logical, efficient, accurate, successful, dependable).

Reflectiveness - (broad-minded, reasonable, sincere, responsible, purposeful, democratic).

Efficiency - (efficient, economical, competent, accurate, dependable).

Intellectual-Ambitious - (ambitious, intellectual).

Compliance - (quiet, patient, obedient, democratic).

Prudence - (thrifty, tactful, studious).

Sociability - (humourous, friendly, active, sociable).

Consideration - (considerate, courteous, cooperative, generous).

Social Success - (successful, popular).

Honesty - (honest, dependable, reliable).

Cheerfulness - (cheerful and happy).

Altruism - (generous, thoughtful, kind, unselfish, polite, loyal).

In general, Finch's findings indicated that:

1) There was a small amount of similarity between self concept and ideal self.

2) Although there were considerable similarity among the self structures of males and females at the senior high school level, there also was uniqueness. Furthermore, the factor structures of males and females at both the junior high school and college levels were dissimilar.

3) Similar factors appeared in the factor structures of self concept and ideal self at all three school levels. Factors appeared to be similar were factors such as social competence, sociability, social success, efficiency and impersonal efficiency.

4) The public and parochial school students were

significantly dissimilar in terms of factors which emerged from their self descriptions.

Although the subject matter of Rettig and Pasamanick's study on moral values in 1962 is not exactly related to the present study, it is still worthwhile to review it, since they compared two factor structures of moral judgement of Korean and American university students. The judgements on 50 morally prohibited behaviour by these students were factor analyzed with the centroid method and the extracted factors were rotated graphically. As for the comparison of the two factor structures they performed transformation analysis.

Despite the great differences in historical antecedents and in religious commitments between the Korean and American students, they found from these factor analyses that there was considerable similarity in the factor structures across the two very different cultures. Of the seven factors extracted from the analysis (1 General Morality, 2 Religious Morality, 3 Family Morality, 4 Puritanical Morality, 5 Exploitative-Manipulative Morality, 6 Economic Morality and 7 Collective Morality), only one dimension (Puritanical Morality) was found to be different between the two cultures. It only accounts for less than 10% of the total variance.

In summary:

- 1) Factor analytic studies of self concept have indicated that the self concept is not uni-dimensional, but multi-dimensional.

- 2) Because of the limited amount of information available on the factors describing the ideal self, no meaningful comparisons between self concept and ideal self factors can be made. Finch's (1973) study, however, indicated that

the ideal self is also multi-dimensional and factors similar to those of the self concept appear in its factor structure.

3) Although it is not entirely clear, it would appear that the factors of self concept vary according to sex, age or educational level, and religious backgrounds.

CHAPTER THREE

PROBLEMS OF CROSS-CULTURAL MEASUREMENT WITH RESPECT TO SELF CONCEPT.

The study of self concepts in different cultures is an area that has received little attention in the past (see, however, Hara, 1972; Siripipat, 1972). Although the logic of cross-cultural research does not differ from any other type of psychological inquiry within a single culture, this field of investigation is beset with conceptual and methodological difficulties which centre on how self concepts are to be defined and how they are to be assessed in ways that enable cross-cultural comparisons to be made. To study something cross-culturally often means that countries become units of analysis. The very choice of countries as units of analysis threatens the validity of the findings, since concepts are expected to have different meanings in different countries, and relationships are expected to differ more between countries than within a single country. These differences are attributed to systemic variables. Furthermore, most of the problems encountered in a within-culture research are also present in the cross-cultural research and the size of the cross-cultural problems makes them more serious.

However, the most critical problem in cross-cultural research is that of identifying equivalent phenomena and analyzing the relationships between them in an equivalent fashion. This general concern is very relevant to the present study which was designed to compare self concepts of high

school students and university students between two very different cultures, Korea and New Zealand.

Much have been written on conceptual equivalence, sampling, problems of respondent's motivation, response style, presentation of the task, and reliability and validity of the test instruments in the current literature on cross-cultural analysis (Frijda and Jahoda, 1966; Dawson, 1971; Warwick and Osherson, 1973; Brislin, Lonner and Thorndike, 1973; Smelser, 1973; Price-Williams, 1975; Brislin, 1976), but these problems except conceptual equivalence are not peculiar to cross-cultural research and hence, will not be discussed here.

In this chapter, however, issues focussing on conceptual equivalence of the concept under study and the translation problems of the test instruments will be discussed as the author sees these as the unique and central problems in cross-cultural comparisons of self concept measured by a questionnaire as in the present investigation.

I. CONCEPTUAL EQUIVALENCE

The most basic, theoretical question in cross-cultural analysis is whether the concepts under study have any meaning or equivalent meanings in the social units considered. The problem is how two or more segments of behaviour in their different cultural contexts can be rendered comparable to one another.

Frijda and Jahoda (1966) stressed functional equivalence as a basis for the comparison of concepts. The behavioural phenomena which are compared should have the same function in different cultures, i.e., they should provide

similar means to reach similar goals. Berry (1969) also emphasized that functional equivalence is a prerequisite for the cross-cultural comparisons of behaviour. He further argued as follows:

"These functional equivalences must preexist as naturally occurring phenomena : they are discovered and cannot be created or manipulated by the cross-cultural psychologist. Without this equivalence, it is suggested, no valid cross-cultural behavioural comparisons can be made." (Pl22)

A similar message is found in an article by Prezeworski and Teune (1966-67) concerned with the cross-cultural study of values. They suggested that there is a need to go beyond the notion of identical stimuli, and that the aim of a cross-cultural investigation is to search for the meaning of concepts in various cultures.

What is revealed in the treatments by Berry and Prezeworski and Teune is that it is of vital importance that the investigator should have an intimate knowledge about the cultures to be compared before he can start comparing them. It has been repeatedly emphasized that the insight of the investigator into the psychological meaning of overt behaviour is apparently seen as the gateway towards the improvement of conceptual equivalence (Holtzman, 1968; Berrien, 1970). Certainly he can not know the function of any given behaviour unless he witnesses that behaviour in its proper setting.

However, self concept can be regarded as one of transcultural dimensions of behaviour known to all cultures, since it emerges from social interaction with others, which is one of the universal functional prerequisites for human existence.

If, for example, we were to make a list of as many

self concepts we could think of, we would find that each is influenced in one way or another by social interaction. Some, like politeness or sociability are social by definition: one can not be polite or sociable except in relation to other people. Other characteristics, like creativeness or honesty, are less social by definition. Although one can be creative or honest in solitude, it is difficult to see how one could acquire such traits apart from social interaction.

An excellent summary of the nature of the trans-cultural properties of behaviour is given by Sears (1961).

He said:

"To the extent that there are universal characteristics of people as biological organisms and universal characteristics of environment, to that extent there are likely to be transcultural properties of behaviour. In other words, we presume that when a given kind of organism has to interact with a given kind of environment, all organisms having the same general property will develop behaviour repertoires that can be conceptualized in the same way". (Sears, 1961, P448)

The term 자아개념 (Cha A - Kae Nyum), the Korean equivalent to self concept is well understood and spoken among Korean people, and can be defined as what I think about myself. Therefore self concept or 자아개념 (Cha A - Kae Nyum) is readily identified both linguistically and observationally, and has an equivalent meaning in both cultures.

II. TRANSLATION PROBLEMS OF THE QUESTIONNAIRE

Besides identifying a transcultural dimension of human behaviour which can be given comparable definitions in the societies considered, there are further challenges in

developing equivalent indicators measuring the concept under study. The problem lies in making the scale items meaningful to the groups concerned, and settling for equivalence in the units of culture taken for analysis. The question is this: To what extent may a questionnaire, developed in culture A, be translated to fit culture B and still retain the meaning it has in culture A?

As Brislin et al. (1973) stated:

"Unless researchers present empirical evidence to support their claim that the different language versions of the same instrument are equivalent, translation problems will always be plausible rival hypotheses for any obtained results". (P32)

This statement implies that if subjects in a cross-cultural study respond more poorly on a questionnaire survey, the results may be taken as supporting a substantive theory. The results may, however, simply reflect poor understanding on the part of the subjects due to a poor translation of the instructions or the items of the questionnaire.

In earlier days of cross-cultural research, heavy emphasis was placed on finding the identical words to arrive at constant stimuli for use in different cultures. But, now, the emphasis has shifted from words to their meaning. Deutscher (1973) argues that the primary aim of translation should be conceptual equivalence rather than strict lexical comparability. He stated:

"Since language is a cultural artifact, it must be assumed that the question is being addressed to peoples who are immersed in two different cultural milieux. To the extent that this is so, it is not sufficient to know simply that the words are (literally) equivalent. It is necessary to know the extent to which those literally equivalent words and phrases convey equivalent meanings in the two languages or cultures". (P167)

The point in his statement is that the identical words are not always intended to represent similar phenomena or to speak to similar considerations. Conversely, different words can be used to represent the same phenomena.

One way in which a translation can be checked for equivalence is the back-translation procedure which is commonly used in cross-cultural research. In a back-translation procedure, the questionnaire prepared in one language is translated into another language by a bilingual and then another bilingual independently translates this translated version back into the original language. The original and retranslated versions are compared and the discrepancies in meaning are clarified or removed. The back-translation can be used as an iterative procedure with a new translation for each iteration until satisfactory versions in both languages are obtained.

Anderson (1967) suggests that the different versions of questions produced by the various cycles of back-translation might be treated as a basis for constructing alternative forms of the questionnaire. From the standpoint of the questionnaire reliability and validity, the technical advantages of this approach are considerable.

The back-translation procedure sounds promising, but it can also instill a false sense of security in the investigator by demonstrating a spurious lexical equivalence.

Brislin (1970 and 1976), after discussing the major advantages and problems of back-translation, argues that the back-translation which is so widely used in cross-cultural research is not a perfect method, although it remains one of the most helpful tools, especially when used creatively, and

suggests a combined procedure for the development of adequate translations including such ideas as the notion of "decentering" in which the original language is open to revision after the first back-translation efforts. Many scholars also argue that research cannot depend solely on the back-translation techniques, and emphasize that it is most desirable to use the back-translation procedure combined with other techniques such as the following:

1) Bilingual techniques : By having bilinguals take the test in both the original and the translated versions, translations can be compared for equivalence and items yielding discrepant responses can be easily examined (e.g., Schachter, 1954; Gough and Dipalma, 1965; Prince and Mombour, 1967).

2) Committee approach : A group of bilinguals translates from the original to the target language and then the different translations are often compared in the presence of still another bilingual. In this procedure, the mistakes of one member can be easily caught by others on the committee (e.g., Barrioux, 1948; Sundberg, 1956).

3) Pre-test (pre-field interviews) techniques: After careful translation, it is pre-tested or pre-field interviewed to ensure that future subjects will comprehend all question items (e.g., Schuman, 1966; Mitchell, 1968).

In the present research, the self concept questionnaire (SCQ) was originally designed in English and then translated into Korean by a combined method using the three techniques mentioned above. It is clear that cross-cultural investigations should be concerned with the communication of many aspects of the questionnaire including the introduction of

the research to subjects, instructions and question items that all demand clear wording in one language and then conceptually equivalent translation into another. Nevertheless, in this section, the author will mainly deal with translation problems of question items, as they are the main part of a questionnaire and it was reported from the interview and the pretest in both countries that subjects did not have any difficulties in comprehending the introduction of the research and instructions which subjects were asked to follow.

Question items of the SCQ were derived from Rogers' idea of self (1951), which implies that many single perceptions standing in relation to each other exist for the same individual. Thus every item an individual considers in evaluating himself can be considered a sample of his concept of self. The SCQ consisting of four parts, each of which contains an identical list of 30-adjective items divided into two subscales, Personal Self (PS) and Social Self (SS), involves the individual arrangement of scores along a subjective continuum ranging between -50 and +50. This is done, for each of the four parts relating to different aspects of the way the individual thinks about himself, in the following manner:

- Part 1 Present self concept as perceived at present,
- Part 2 Changes in the self concept in the last two years,
- Part 3 Changes in the self concept in the next two years and
- Part 4 Ideal self as the individual would like to be.

Thirty question items, each of which is accompanied by two short descriptive adjectives or phrases, were derived from literature such as MMPI (Hathaway and McKinley, 1940),

16 PF Test (Cattell, 1962), children's self concept Inventory (Piers and Harris, 1964), Tennessee Self Concept Scales (Fitts, 1964), and Value Survey (Rokeach, 1971), and modified into adjectival form on the basis of the following general guidelines that are likely to give the investigator an easily translatable English version.

1) Avoid concepts that are so particular to a single culture that no instance of the concept can be found in other culture (Chapanis, 1965; Smelser, 1973): that is, borrowing Pike's (1966) well known terms emics and etics referring to culture-specific and universal aspects of behaviour, a search for etics rather than for emics has been adopted.

2) Use short phrases and simple sentences (Chapanis, 1965; Brislin et al., 1973). This is especially relevant in this study, since English and Korean have completely different sentence structure, and therefore the translation is obviously more difficult than between, say, English and French.

3) Use familiar rather than unfamiliar words (Chapanis, 1965; Warwick and Osherson, 1973).

4) Avoid metaphors and colloquialisms (Werner and Campbell, 1970; Brislin et al., 1973).

5) Avoid English passive forms and subjunctive mood (Werner and Campbell, 1970; Brislin et al., 1973).

After the original English version had been framed by the author who consistently bore in mind that comparability of question items should be retained in items of, if possible, both lexical and conceptual equivalence between the original (English) and the translated (Korean) versions,

a New Zealand professor of psychology reviewed the work and corrected several items. Then the questionnaire was pretested with 22 high school and 36 university students in New Zealand, and they were individually interviewed by the author to insure that future New Zealand subjects will comprehend all question items and instructions.

To obtain the Korean version of the questionnaire, five Korean high school teachers of English, who have an average of 8 years experience in teaching English in Korea, and who were, at that time, nearly finishing their one-year course in teaching English as a second language at the Victoria University, Wellington, New Zealand, translated individually the final English version (see Appendix 1) into Korean. Although they may not have an extensive knowledge of psychology, but because of their personal experience of living in both countries, it can be said that they are the most suitable and competent bilinguals for the translation of the question items for this particular cross-cultural comparison between Korea and New Zealand, than any other bilinguals who are also experts in the field of psychology, yet lack the living experiences with these people.

The five translations were then compared, and the differences resolved by discussing the merits of each item among the author, one of the five translators and another Korean bilingual who had lived in New Zealand for three years as a postgraduate student. This semi-final Korean version of the questionnaire with the English version was sent to two Korean professors of psychology in Korea to obtain their professional advice on the work.

After some minor alterations as advised by those Professors, this version was translated back into English to check how different the Korean version is, lexically and conceptually, from the original English version. As seen in Appendix 3, both the original and the back-translated versions can be considered conceptually equivalent, although some are not lexically equivalent, and therefore, the author accepted the Korean version which was back-translated into English, as the final Korean version (see Appendix 2).

When the Korean version was pretested with 12 high school students, it was also reported that they had no difficulty in understanding the instructions and question items.

CHAPTER FOUR

THE SPECIFIC CASE OF NEW ZEALAND AND THE REPLUBLIC OF KOREA
(SOUTH) : FACTORS MAKING FOR CONTRAST.

It is generally accepted that the self concept of an individual is chiefly the result of conditioning by culture. If culture is defined as a composite of specific ways of thinking, feeling and acting (Woods, 1956), Korean and New Zealand young adults may be differentiated on the basis of culture.

Although there have been very few investigations of Korean psychology published in English, many Korean scholars (Lee, 1977; Yoon, 1976, 1964; Park and Gallimore, 1975; Kim and Chung, 1974) have suggested that studies of cognitive styles of Korean people in comparison with those of Westerners would be of particular interest, since cross-cultural differences are very large.

The research which this thesis reports is on the self concepts of Korea and New Zealand students in urban areas. While the two societies compared vary in their degree of internal societal differences, samples of high school and university students may not sufficiently reflect the influence of these differences. Nevertheless, students reflect a relatively highly differentiated sector of their respective society. To that extent differences that emerge between the two sample groups represent cultural differences that exist on that level.

In this chapter, four main factors making for contrast between the two cultures will be discussed, general background of the social structure, socialization within family life,

the educational system, and religious background.

I. TWO DIFFERENT SOCIETIES : TRADITIONAL ORIENTAL SOCIETY VERSUS EGALITARIAN WESTERN SOCIETY.

Korean Society

Korean society has traditionally been dominated by the Confucian teachings of social order which stresses conformity based on the natural inequality of status in **삼강** (Sam-Kang), the three bonds between elders and youth, men and women, rulers and the ruled. In spite of the foreign nature of their origin, these Confucian ideas have been so eagerly embraced by the Koreans and inculcated into their minds that even the Chinese (at least up to 1940's) regard the Korean adherents as more Confucian than themselves (Han, 1970).

Confucian ideas are based on a preordained natural order of society in which man's whole social duty is embraced in **오륜** (O-Ryoon), the five fundamental relationships: (1) sovereign - minister (or sovereign - subject); (2) father-son (or parent - child); (3) elder brother - younger brother (includes sisters); (4) husband - wife (or male - female), and (5) friend - friend. These relationships are held to be as permanent as the universe. Peace and order prevail if the king acts as a true ruler, and the people behave as true subjects, if the husband is faithful as a true husband should be, and the wife as virtuous as a true wife is. In short, harmony in the society is achieved if everybody fulfil their social duties according to their respective roles within the structure of these five fundamental human relationships.

The fundamental element in the rules of proper conduct is that of inequality. This theory of inequality, that everyone should be under someone's direction, illustrates the

hierarchical nature of the five fundamental human relationships. Within the extremes of the lowest and the highest, everyone has inferiors below him and superiors above. Responsibility and benevolence descend from above, and absolute obedience and respect ascend from below. Hence, a hierarchy of superiors and inferiors based on *삼강* (Sam-Kang) is established in traditional Korean society through the social order.

Nakane (1972) distinguishes two basic categories of human relations, "vertical and horizontal" according to the way in which ties are organized. To borrow his term, traditional Korean society can be described as a vertical authoritarian society.

For the past twenty-five years, especially since the end of the Korean War, however, the vertical authoritarian structure of Korean society has been radically changed by the influence of Western democracy and industrialization: The family system is loosening and the role of women freed of formal restrictions; young people show increasing independence and freedom of self-expression; urban population becomes increasingly larger than that of rural; occupational mobility and the keen competition for positions in the city are on the increase; egalitarian and individual hedonistic tendencies are developing along with a consumer culture. Nevertheless Confucian concepts are still effective in social relations in the modern Korean society.

Therefore, the present state of Korean society, especially in urban areas, can be illustrated in terms of a confrontation of the two different cultures - the authoritarian traditional system and the democratic Western system. Hence this dual image of modern Korean society is a very complicated one, and

to examine such a society, one has to look at it from the perspectives of the two very different cultures which sometimes coexist peacefully but sometimes are at odds with each other. The older generation, for instance, in their attempt to discard the authoritarian way of life has accepted democracy, but some of them still maintain their personal attachment to the old patterns of culture, while the younger generation on the other hand, is eager to embrace democracy completely, taking maximum freedom and initiative according to Western values. As a result, the old and the young are often in conflict with each other.

Thus the general picture of Korean society is one that shows a society in transition. However, there seems to be agreement that Korea is not moving evenly in all spheres of behaviour toward individualism, but rather has retained a strong emphasis on the importance of the five fundamental human relationships, even though these may be expressed today in humanistic terms instead of in terms of filial obligation and loyalty (obedience) to one's superiors.

New Zealand Society

Although the major influence shaping modern New Zealand society came from the original British settlers who brought with them their traditional ways of life, one of the pronounced features of contemporary New Zealand society is the fact that it has not perpetuated the British structure of 19th Century social classes and has strongly emphasized an egalitarianism with the idea that men should be equal in all phases of life at all ages, in rewards as well as in opportunities (Hines, 1973; Collette, 1973; Hansen, 1969; Chapman, 1962).

For the past thirty years, the policies of the Government regarding redistribution of income through taxation, comprehensive social welfare facilities, and education have extended a marked tendency towards an ideology of social equality as a whole (Sinclair, 1973). Ausubel (1960) also pointed out that, because of the broad base of egalitarianism taught at home, nurtured in school, and reinforced in sociology by the legal and economic system, the great majority of New Zealanders is believed to share this philosophy.

Therefore it is not surprising that there is a tendency among many New Zealanders to ignore the existence of social stratification. However, it must be noted that, in a society with such strong tendencies towards homogeneity and such lack of social differentiation, people are more likely to ignore differences of social class in their interpersonal situations, even though they actually perceive the subtle symbolic evidences of such differences (Vellekoop, 1973; Barber, 1957).

Recently several writers (e.g., McGee, 1973; Harker, 1971; Congalton, 1953) have pointed out the existence of class awareness in New Zealand. There are certainly people who think they are better than others because of their possessions, their friends and their good manner, but there is no evidence yet that this attitude is the defining life style of distinct groups of people.

As Vellekoop stated:

"New Zealand is a young country without a hereditary aristocracy, without any distinctions drawn by birth or lineage. There is a limited degree of specialization and differentiation within the division of labour: manual work is in high demand and industry is not well developed. Economic distinctions between people are less marked than in other countries. There are no extreme differences in the spending capacity of the various social groups: taxation and

inheritance tax help to keep economic distinction down. Differences between social strata are related more to occupational position than to any ascribed statuses such as race, religion or ethnic background". (1973, P.84)

Both Chapman (1962) and Ausubel (1960) also made similar statements, that the social equality in New Zealand is not only a result of egalitarian ideals, but is brought about by the late development of secondary industry, and the short time that has elapsed since the beginning of major European settlement. Therefore it would be more plausible to say that New Zealand is not a classless society but more classless (Sinclair, 1973) than perhaps any other country in the world, or a loosely graded society (Chapman, 1962) consisting of dominantly middle class people.

II. THE TWO DIFFERENT APPROACHES TO SOCIALIZATION WITHIN FAMILY LIFE.

Although the two different societies, Korea and New Zealand, may have different forms of family life, there is no doubt that the family, regardless of its origin, function as a teacher of culture to the child through its particular way of life. In all societies, as Ackerman (1958) said, the family is the basic socializing unit within which an individual's self concept is rooted and nourished.

As the child internalizes the cultural patterns of his family life, he acquires group ideas, attitudes, values and expectations. Because parents, siblings and relatives constitute the child's social world for the most part, the definitions given him by these people and estimation of his own worth from these definitions are important factors in the shaping of his self concept. That is why Glasner (1961) stated that the child's concept of himself as a person is formed within

the wombs of family relationships.

Therefore, the contrasts between Korean and New Zealand ways of family life may be viewed as contrasts between the sum totals in their respective self concept and culture.

The Structure and Size of Korean and New Zealand Families

One of the specific mechanisms through which Korean and New Zealand children begin their contrasting ways of life is the family structure and its size.

Although industrialization, urbanization and Westernization have led to the disintegration of the traditional extended family system in Korea, it is still common practice to include in the Korean term for family grandparents and, often, unmarried uncles and aunts. Even in the modern Korean family, elderly parents expect to be supported by their children and to live with at least one of them, usually the eldest son. Even when grandparents do not live under the same roof with their children, they usually reside very close to their sons and generally have very close contacts with the members of the extended family.

On the other hand, the standard family in New Zealand is the relatively small two-generation unit of parents and their children (nuclear family - 86.4%, average family size - between 3 and 4 in 1971 : New Zealand Official Yearbook, 1976). Although most New Zealanders retain links with their family of origin (Ramsay, 1975), the relationships are not so close as in the Korean family system. In New Zealand, the son as well as the daughter leaves the parental home at marriage. Financial aid is not given as regularly and to as wide a range of kin as in Korea. The New Zealand family is also not required to live with or near either the wife's or husband's

kin. The family is comparatively free to live where it desires. However, as Sussman (1965) and Gilson (1973) found, it is quite common in New Zealand that members of the extended family maintain ties mainly for social, domestic and sometimes financial purposes, despite geographic isolation.

In a New Zealand family, parents are the sole agents of control over their children. The grandparents and in-laws do not ordinarily assume the disciplinary role, whether they live in the same house or not. Contrary to the New Zealand scene, Korean parents have much less exclusive control over their children. The grandparents and in-laws can do almost anything that they think as right with regard to the children. This reflects the characteristics of the Korean family system which stresses conformity based on an age-graded hierarchy.

Thus the Korean child grows up amidst continuing or more frequent contacts with a number of relatives besides his own parents and siblings than his New Zealand counterpart does. In other words, from very early in life, the Korean child is conditioned to appreciate the importance of getting along with a wide circle of relatives, while the New Zealand child is relatively not so conditioned. Undoubtedly, this could affect, in both cultures, the styles of interaction among family members and the techniques the parents use to train their children, and accordingly, develop sharp differences between their cognitive styles.

The parent-child relationship is the most salient influence in the early years of the child's life. However, the interactions with other family members also can not be ignored particularly in affectional relationships which have a special importance for the socialization of the child (Houston,

1970). Furthermore, as Bossard (1945) stressed earlier, the network of interactions in a large family is bigger and more complex than in a small family. For example, in a family of three, four interactions are possible (mother-father, mother-child, father-child and mother-father-child), but in a family of four there are eleven possible interactions. All these interactions have emotional loadings and, in addition, serve to present to the children many models of possible behaviours that he might imitate. Unfortunately this factor has not been extensively researched in the literature.

The Husband-Wife Relationship in the Two Family Patterns

Another aspect of the family life which can be contrasted between the two cultures is the task allocation between the husband and the wife.

It is obvious that the main interactions in a complex family take place between the husband and the wife and any children, although other people in the household such as relatives will have some influence on the patterns of interactions. Therefore it is assumed here that the relationship between husband and wife is of primary significance for their children and provides the main psychological environment in which the child learns his sex status in his culture and the role behaviours appropriate to it. For example, the boy, by observing and imitating his father's behaviour, learns how a man, a father, and a husband behaves in a variety of circumstances. On the individual level, his sex status becomes a psychological identity involving evaluative discrimination about his own self and his own behaviour.

Bernard (1964) distinguished two primary patterns of marital relationship: the institutional or parallel pattern

and the companionship or interactional pattern. The parallel pattern is tradition-oriented.

The typical parallel pattern exists even in the modern Korean family. The husband provides financial support for the family and the wife carries on the daily household activities. The wife usually takes up no outside work, and her social activities are typically limited to the immediate neighbourhood and relatives, and to meetings connected with the local school. As a result, her entire life centers around the family. Just as the wife ordinarily does not work outside the home, so the husband ordinarily does no housework. Many Koreans abhor the idea of a man working in the home except for a few minor things such as repairing jobs. If a husband does help in the home (especially in the kitchen), it is considered very peculiar and improper by both men and women alike. Husbands who work outside the home generally work very long hours (six days a week and 10 - 12 hours a day) and spend less time at home than many New Zealand husbands so that family activities are left more completely to the wives. In the Korean family, most family activities are determined by customs and wives are likely to play a much greater role in making the day-to-day decisions. But in case of disagreement, the final decision rests with the husband, who holds a higher position than that of the wife in the Confucian hierarchy of human relationship.

In New Zealand, the relationship between husband and wife also seems to be typically parallel: the husband is the chief bread-winner for the family and the wife does most of the housework. However, its distinguishing feature, resulting from women's actual or potential economic independence as well as educational and social equality, is the sharing of house-

hold chores by husbands and wives. When the wife is employed (26.1% of all married women were employed in 1971 - New Zealand Official Year Book, 1976), she can assign much of the domestic responsibilities to the husband, and most New Zealand husbands are willing to assist with routine housework including cooking, laundering and looking after the children. Some, after a long day's work, are still willing to help their wives with washing dishes after dinner, even if their wives are working full-time in the house and have not taken up any other jobs. Calbert (1970) also observed that increasingly husbands are showing concern for the care and education of their children and sharing the responsibility of child-rearing with their wives.

According to a study made by Webster and Hancock (1970), wife involvement in the husband domain is higher than its opposite, and there seems to be a general case for the claim that the New Zealand wife is more actively involved on a broader scale of family activities than was the case in the American evidence (Goode, 1964). Webster and Hancock further argued that most of the differentiation of task roles in the New Zealand family appears to have a practical basis in the apportionment of time, energy and ability in appropriate areas.

With regard to decision making in the family, although most husbands appear to make major family decisions, many married couples, as Brown (1970), and Webster and Hancock (1970) have indicated, share authority in decision-making in child control, social and economic areas.

In short, the New Zealand pattern is more interaction-oriented than the Korean pattern. In the interactional pattern, roles are of little importance compared with the relationship

with the spouse. Self investment, an expression of the self in the relationship, satisfaction of personality needs, a high degree of personal involvement are suggested as characteristics of the interactional marriage (Bernard, 1964).

Elder's (1962) study based on data from the adolescents disclosed that the equalitarian husband-wife relation is more strongly associated with higher achievement motivation on the part of their children than either of the wife-dominated or the husband-dominated family environment. In his analysis of power allocation and achievement values in Italian and Jewish families, Strodtbeck (1958) found that the less the mother and the son are dominated by the father, the greater the disposition of both to believe that the world can be rationally mastered. The important point here is that dominance relations in the family are negatively related to achievement and independence orientation among children.

Child-Rearing and the Parent-Child Relationship in the Two Family Structures

The third question on the difference of the two family lives is about the child-rearing methods and parent-child (mother-child) relationship.

Although many psychologists (e.g., Thurston and Mussen, 1951; Caldwell, 1964; Rogers, 1969) have rejected the notion of direct relationship between a specific child-rearing technique and later characteristics, it is generally accepted that any child-rearing practice fundamental to a culture would tend to influence a basic personality type within that culture. Besides, the modes of interpersonal context within which child-rearing occurs, especially, are believed to leave an indelible imprint on personality.

Although in both cultures the father serves as the sterner figure of authority to the children, it is the mother who plays the leading role to the children, since she stays at home much more constantly than the father. Thus child-mother relationship will be mainly discussed here in relation to child-rearing methods.

Differences between New Zealand and Korean mothers in the caring of children are evident even in early infancy. The Korean pattern of child-rearing is one of deliberate indulgence. The child is never put on a rigid schedule for any biological function as in the New Zealand pattern. The Korean mother generally nurses her child by breast-feeding, and the time of weaning varies and is sometimes continued until the birth of the next child. Once training has been initiated, lapses evoke neither concern nor disappointment. The rearing of very young children is relaxed and loving in the period of babyhood, and feeding, toilet-training and other aspects of control are minimal.

Mother and child often bathe together until the child is of primary school age. She generally sleeps on the same mat with the youngest child until he is at least three or four years old. Thus when the child is young, the Korean mother is almost never away from her child and devotes herself completely to her child. This stresses the mutual dependency of mother and child, and relates to the basic alignment in Korean family : mother and children versus father. This is, of course, not hostile, but refers to a real psychological, behavioural deviation within the family.

In this respect, things are quite different in New Zealand. The generations are usually separated, for example, in having

a bath or in sleeping arrangements, shortly after birth, and remain so throughout the life cycle of the individual. This expresses the fact that in New Zealand the husband-wife relationship takes precedence over the parent-child relationship, whereas in Korea a stronger emphasis is placed on the latter relationship.

Generally speaking, the child-rearing pattern in New Zealand is more impersonal and matter-of-fact, and less spontaneous and relaxed (Ausubel, 1960) than the Korean pattern. Depending much on the advice of the Plunket nurse, the New Zealand mother feels that there are rigid norms which the child should measure up to if he is to be regarded as normal. For example, babies should be sitting up at six months, weaned at ten months, walking at a year, toilet trained at two years, etc.... One of the greatest fears is spoiling the baby. Hence unscheduled feedings and cuddling tend to be taboo: and fretting infants, regardless of the circumstances, are generally left to cry it out instead of being picked up and comforted. By Korean standard, it seems that the rearing of children in New Zealand is not intended to provide enjoyment or emotional satisfaction.

In Korea, child-rearing is the exclusive prerogative of the mother with occasional assistance from the grandmothers if available. But in New Zealand, it is not uncommon for fathers to take part in the nurturing process according to the amount of time their occupation permits them to spend with their family.

As Korean and New Zealand children grow older the contrast between their experiences is intensified. In both cultures, the child is viewed as a potential to be developed.

Discipline, however, receives a different emphasis and has a different mode of expression in each culture. New Zealand parents discipline their children to do things themselves. At the age of three or four, they train children to be big boys and girls, to dress themselves, feed themselves and defend themselves by placing a high value on independence and self reliance. On the other hand, Korean parents do not encourage them to do these things by themselves, although they are pleased if their children can do any such similar things.

Korean children are rarely put to bed at regular hours. Korean parents take their children with them on many more occasions than New Zealand parents do, such as weddings, religious celebrations or even ordinary social gatherings. Thus the Korean children are initiated into social and ceremonial matters in their early years, and accordingly, the world of children is not sharply differentiated from that of adults. On the other hand, New Zealand parents firmly refuse to let their children enter the world of the adults. For example, they leave their children with a babysitter when they go to parties. If they entertain their guests at home, they put the children to bed before the guests arrive. Children have no part in parent's social activities. They interact with their parents less frequently and intimately than children do in Korea. The parent-child relationship is more formal and the adult-child barrier more formidable. Therefore it would be assumed that the New Zealand mothers are emotionally less close to their children than their Korean counterparts. The result is that while Korean children unobtrusively enter into the world of the adults, New Zealand children tend to develop a world of their own. This is further accentuated by the Korean

parents' insistence on complete community of interests with children, as much as by New Zealand parents' insistence on privacy for all individuals.

Ritchie and Ritchie (1970, 1973) also reported in their studies of child-rearing patterns in New Zealand that there is a characteristic lack of real intensity of feeling in New Zealand mothers. They further argued, taking hospital nursery, bottle-feeding, crib, cot and pram as signs of distance between mother and child, that "the emotional distance between the parents and the children is early set and well established by the time the child is four. This remoteness is a complex thing but characteristic. Our is a 'don't touch' culture where physical contact is taboo or deeply inhibited almost from the start".

Another striking contrast between the New Zealand and the Korean training patterns is, as Ausubel (1960) pointed out, the absence of significant social class differences in the way New Zealand parents discipline their children. In New Zealand, heavy taxes on the high income earners, welfare and free education programmes have reduced the economic distance between the low and the high classes and consequently the differences in their life styles as well. In Korea, however, evidences of parental affection and warmth for children are much greater in upper-class than in lower-class families. Upper-class parents also seem to adopt more moderate techniques for disciplining children such as reasoning, appealing to their sense of guilt rather than resorting to physical punishment. They punish or refrain from punishing on the basis of their interpretation of the child's intent in acting as he does. In lower-class families, communication between parents and children

is less open, and the psychological distance between them is greater. In matters of discipline lower-class parents are consistently more likely to employ physical punishment. Furthermore, lower-class children are more likely to suffer from parental deprivation through the absence of the father who has to work longer hours than the father in the upper-class and consequently has little time to interact with his children.

The Effects of the Two Family Patterns on the Self Concept of Young People From These Families

In conclusion, a few of the crucial issues in the comparison of Korean and New Zealand family lives have been discussed, recognizing the problems of validity and weak data resources for interpreting both family lives. Largely because of different patterns of interaction with their family members in the two countries, children have learned to behave in different but culturally appropriate ways. Moreover, these differences in child behaviour are in line with preferred patterns of social interaction at later ages as the children pass from childhood to adulthood in Korea and New Zealand.

Based on current trends, a summary statement is tentatively suggested as in table 4-1. This table is not meant to be definitive as a statement of the way things are in specific cases; instead it relates to generalizations that can be pursued in research comparing the self concepts of young adults of the two cultures.

(TABLE 4-1) NEW ZEALAND AND KOREAN FAMILIES COMPARED

OBSERVATIONS	KOREA	NEW ZEALAND
STRUCTURE AND SIZE OF FAMILY	<p>Relatively large nuclear or modified extended family</p> <p>Large network of interaction</p> <p>Group oriented</p> <p>Emphasis on security in multiple adults</p> <p>Economic sharing</p>	<p>Relatively small nuclear family</p> <p>Small network of interaction</p> <p>Individual oriented</p> <p>Emphasis on privacy and independence</p> <p>Private economic struggle</p>
Effects on Child	<p>More dependent and emotionally more attached to family</p> <p>Imitative, obedient, subservient to authority</p>	<p>Self reliant, self assertive</p> <p>Innovative, progressive</p>
HUSBAND-WIFE RELATIONSHIP	<p>More parallel pattern oriented</p> <p>Husband dominance</p> <p>Less sharing in decision-making</p>	<p>More interactional pattern oriented (basically parallel)</p> <p>Cooperation based on the idea of equality between man and women</p> <p>More sharing in decision making</p>
Effects on the Individual	<p>Sex role stereotyped</p> <p>Authoritarian (male); submissive (female)</p> <p>Less achievement oriented</p>	<p>Recognises few differences between sex roles</p> <p>Self expressive</p> <p>More achievement oriented</p>
CHILD REARING	<p>Indulgent and relaxed</p> <p>Less strict discipline (toilet-training etc)</p> <p>More breast-feeding</p>	<p>Control oriented</p> <p>Strict discipline (toilet-training etc)</p> <p>Less breast-feeding</p>
Effects on Child	<p>Dependent</p> <p>Shows less initiative or adventurous spirit</p> <p>Early initiation to and contacts with adult world</p>	<p>Independent</p> <p>Creative, explorative</p> <p>Separated from adult world.</p>

(TABLE 4-1) NEW ZEALAND AND KOREAN FAMILIES COMPARED CONTD.

	KOREA	NEW ZEALAND
MOTHER CHILD RELATIONSHIP	Physically and emotionally very close Mutually dependent More non-verbal commun- ication	Physically and emotionally less close Independent of each other More verbal communication
Effects on Child	Emotionally relaxed	Self assertive and aggressive
Effects on Mother	Closer to child than to husband	Closer to husband than to child
CHILD-REARING AND SOCIO-ECONOMIC STATUS	Shows significant differ- ences between the upper and lower-classes	Shows little difference between the various groups

III. THE TWO DIFFERENT SCHOOL SYSTEMS

The school is second only to the family in its impact upon the self of a child. Schools teach not only the fundamentals but also values and behaviour patterns, concepts of the world and self, and the wide range of information, both formal and informal, which is necessary to the child in the process of becoming an adult accepted by his society.

In this section a general outline of the two different school systems will be presented and then several contrasting features, which contribute to the shaping of different patterns of individual behaviours, will be followed.

The School System in Korea

The school system in Korea is basically divided into six years of primary, six years of secondary (three-year middle school and three-year high school) and four years of university education. Presently only six-year primary schooling is

compulsory, but a plan to extend compulsory education for another three years up to middle school by 1981 has been confirmed.

Korean children begin school at the age of seven, but some (about one in two of the children in the urban areas) receive up to two years pre-school experience (ages 5-6) mainly from private kindergartens. Although, in many primary schools, the first year (Grade 1) is treated as a continuous experience extended from home, school is a far more rigid and formalized environment for Korean children in contrast to the lack of explicit formalization of child-care at home.

Traditionally, the child in Korea is expected to adjust to the school rather than for the school to adjust to the child. The child is expected to live in a new environment and to compete for the rewards of obedience and scholarship. Thus competition among children is encouraged from the beginning of primary school, although promotion at the primary school level is based, not on academic ability, but on age only.

After the six years of primary schooling, most children (75% of the total primary school graduates in 1973) advance to three-year middle schools in the same district where they reside.

A distinctive feature of Korean secondary schools is the separation between boys and girls which is not practised in primary schools. This accounts for the existence of 여자 중·고등학교 (girls middle and high schools) and 남자 중·고등학교 (boys middle and high schools) which, however, share the same curriculum.

The pressure on Korean students increases as they move up the pyramidal structure of the education system. Competition is keener as opportunities at the higher levels are fewer. The

sifting process starts at the end of the third year in middle schools, and those who want to proceed to high schools have to pass the qualifying exams run by the state. Successful candidates with an aim at a university education will mainly proceed to the academic high schools, while the rest will join the vocational schools.

Since facilities for higher education are far below demand (the ratio of applicants to university seats is 5 to 1), and since the government controls the ceiling of students to be enrolled in universities, competition at this level is even more severe. All university applicants are required to sit the qualifying and physical exams which pick up as many qualified candidates as 200% of the all-university-enrollment quotas. These candidates, then, have to sit the entrance exams administered by the particular universities from which they seek admission.

What intensifies the competition is the hierarchical ranking of universities. As graduates from certain universities are preferred to graduates from other less prestigious universities by most potential employers, the strife for entrance to the famous universities is quite serious. This gives rise to a new social phenomenon creating a group of students called Jae-Soo-Saing (재수생). These are students who, having failed the entrance exams in the previous year(s), would rather spend one or more years preparing for another attempt to enter the specific universities they have in mind, than enter an "inferior" institution. By now, they form a significant portion of the new entrants to the top-ranking universities, thereby cutting down the number of openings available to fresh graduates from high school.

Since a university degree is a basic requirement for desirable employment in Korea, the future prospects of most youngsters are determined by their success or failure in the exams, and consequently the curriculum in the academic high schools is geared to meet the requirements of the higher institutions instead of to the needs of developing the individuals.

Finally, there are two more interesting observations in the educational scene of Korea. Firstly, although for the last three decades women have been enjoying the right to equal educational opportunities, they only represent about 10% of the student population in the university (Korean Annual, 1976). Secondly, as the education expenditure is largely financed by the parents, it follows that most of the Korean university students are from the better-off families.

The School System in New Zealand

In New Zealand, schooling is compulsory and free from ages six to fifteen. However most children start their primary schooling at the age of five and pass through the infant classes (primers 1 - 4) in two years and the first four standards (standards 1 - 4) in four years. The next two years (Forms 1 & 2) in the primary system are spent either at the same school or by transfer to an intermediate school or an intermediate department attached to a secondary school. Geographical location will be a determining factor between these three alternatives (Melvin, 1968).

Even textbooks are provided free, and the choice of textbooks is left to the discretion of each individual school. A determined effort to avoid producing stereotypes and to encourage innovation, as well as a practical approach in teaching

as reflected in the curriculum which emphasises the application of knowledge to daily life can be observed. Moreover, the schools are free to decide the content of their core studies and activities, and teachers are expected to adopt their methods to the needs of the individual students.

The teacher in the classroom is expected to develop a programme which will meet the needs of widely varying levels of achievement. Many schools set up composite classes — Standard 2 - 3, Standard 3 - 4 — as an organizational means of enabling a teacher to provide a child with opportunities for continuous development, thus blurring the distinct steps between the two levels (Robinson, 1973). Promotion to the next level through the school is based on social factors. That is, each child moves vertically with his age-mates. Thus in New Zealand primary school, teacher-pupil relationships are liberalized and humanized. The social and emotional climate of the school is friendly and relaxed.

New Zealand secondary schools which provide five years of education (form 3 - 7) are planned, staffed and organised to cater for all youngsters of secondary age irrespective of their ability and academic attainment (Robinson, 1973). At present most pupils go on to secondary school at the age of thirteen-plus. There are no selection procedures for secondary schooling in New Zealand, and subject to certain zoning requirements in larger cities, parents are free to choose for their children the school and courses deemed most desirable and suitable.

Children move forward through the system with their age groups until age 15 or 16 (form 5) when they face their first major exam - the School Certificate Examination, which is the basic educational qualification in New Zealand. Their vocational

prospects may depend on their performance in this examination, for those who are successful find entry into a number of vocations which would otherwise be closed to them (Ramsay, 1975).

Many pupils who are successful in the School Certificate Examination continue their studies at the Sixth Form Level to gain the University Entrance qualification. For most, this will be accredited; it is granted on the recommendation of the school and based on the year's work. There is opportunity for those not accredited to sit the examination in the traditional way. All pupils who complete their Sixth Form year at a satisfactory level receive a Sixth Form Certificate. The Seventh Form programme prepares the pupil to sit Scholarships and Bursary examinations, but more generally it is a year of advanced study in which there is opportunity fostering independent work and the critical approach, which will be characteristic of university studies.

The role of the New Zealand secondary school is now generally seen as to provide a broad general education, with the vocational training left to the tertiary level in the technical institutes. The broadening of concern includes social education or liberal studies in which the schools go beyond the normal curriculum to involve students in consideration of values and practices in personal relationships and social issues of local, national and world-wide importance (Robinson, 1973).

Entry to the university is open: qualified applicants, not by competition, but by statute, are entitled to admission. It is clear that New Zealand makes higher education available on some of the most generous terms in the world. Over half of

all university students receive free tuition (Melvin, 1968). The universities are now seen to have a dual role: to train young people in specific fields to meet the needs of the community, and to help produce educated people with a humane sense of values, a wide intellectual horizon, and alert, informed and enquiring minds (Robinson, 1973).

Coeducation exists at all stages of the New Zealand education system. All public primary and all intermediate schools teach boys and girls together. At secondary school level, four-fifths of the state schools are coeducational and single sex schools are chiefly private (Ramsay, 1975; Melvin, 1968). At the university level, there is no segregation of the sexes. However, they are, unlike at primary and secondary levels, quite disproportionately involved in tertiary education. A large number of girls leave secondary school at the statutory release-age of fifteen, and not all of those who remain to sit for higher school certificates (Sixth Form Certificate), or University Entrance exams go on to university. Hence female students contribute to only one quarter of the total number of students enrolled at the universities (Melvin, 1968).

The Two Systems Compared

As noted above, several features of the Korean education system present rather striking differences to that of the New Zealand system.

First, the Korean school is a more group-oriented and formalized environment where the emphasis is placed more on producing a responsible, competent and socialized citizen who supports values of the society, rather than on fully developing latent capacities of an individual. Students become over-habituated to work hard and behave themselves and they are

trained to accept the views of the teachers indiscriminately.

But in New Zealand, there has been full recognition of the importance of individual development (Mason, 1944; The Currie Commission, 1962). Part of the Government statement contained in the annual report of the Minister of Education (the Rt. Hon. P. Fraser) in 1939 clearly explained this:

"Schools that are to cater for the whole population must offer courses that are as rich and varied as are the needs and abilities of the children who enter them".

Accordingly it has been realized that teachers must be attentive to the needs for growth in the individual student. They put less emphasis upon obedience to authority but stress the value of self-discipline and self-direction. Therefore, there are more friendly relationships between teacher and students, and a much greater freedom and flexibility in classroom order and classroom behaviour than in the Korean scenes. Despite some improvements in recent years, the teacher-student relationships in Korean schools are still observed as far more rigid and authoritarian.

Secondly, moral discipline receives a greater emphasis in Korea than in New Zealand. An organized programme of moral education is provided every week in each grade throughout the whole primary and secondary school system. Broadly speaking, moral education in Korea aims at elevating moral sentiments, and providing knowledge and understanding of the Government, the economical situation, and social problems, which is vital to good citizenship. This is well expressed in the National Charter of Education promulgated in 1968, which aims at inspiring the people with a high moral sense and the historic mission of regenerating the nation. Part of the Charter reads:

"With sincere mind and strong body, improving ourselves in learning and arts, developing the innate faculty of each of us, and overcoming existing difficulties for the rapid progress of the nation, we will cultivate our creativity and pioneer spirit.... We will do our best to serve and participate in building the nation".

In 1972, the Ministry of Education initiated a new programme to revise the curricula for primary and secondary schools, as well as junior teachers college with a view of, what the government calls, "education with nationality". Under the programme, the new textbooks put a greater emphasis on national history to create a heightened consciousness of national identity among students (Korean Overseas Information Service, 1976).

In contrast, moral education in New Zealand schools is not treated as an independent subject and there is no scheduled allocation of time for it. Moral and ethical education integrated into all the other subjects in primary schools, and usually in social studies or religious studies in secondary schools. Furthermore the contents of moral education in New Zealand seem to be different from those in Korea. The New Zealand Advisory Council on Educational Planning (1972) suggests "development of attitudes" as one of the three major areas in which the school should be specially competent. It distinguishes two types of attitudes: those involving deep convictions which underlie moral character and those social attitudes such as tolerance, loyalty, justice and attitudes towards achievement. It further argues that as the moral attitudes require for their development an intimate and emotionally charged interaction within a very limited group of individuals, this function is largely the responsibility of the family, yet the development of the social attitudes is facilitated by the school through

group activities, discussions, and through application and practice which are particularly appropriate tasks for secondary schools but not for primary, because they often require a reasonable degree of intellectual and experiential maturity.

Thirdly, the keen competitiveness in the school system in Korea is another outstanding feature in contrast to the New Zealand situation. Competitive evaluations, which ignore varying sociological backgrounds and individual differences in ability, often begin in the first grade and continue throughout school. Children are constantly being ranked and evaluated, and encouraged to enhance their superiority over their fellow students.

Since there are usually many more applicants than job openings, and university education is considered as an absolute requirement for desirable employments, success in achieving a secure place in Korean society depends heavily on a successful academic career. Therefore competition for entrance into the best schools is very keen, and students must observe a study schedule, at least from the beginning of middle school onwards, if they want to enter a prestigious university. The task of preparing for the entrance examinations is not left to the students themselves, but is shared by their parents (mainly mothers), and success or failure in the examinations, affects seriously the pride of the family as well as that of the youngsters themselves.

By contrast, there is no selective procedure throughout the whole New Zealand school system, although the same general competitiveness may be observed among school children by the system of grading students on day-to-day performance and by

several external examinations. University is open to everyone who qualifies for it and not by competition. Therefore there is much less psychological, physical and sociological strain on the New Zealand students and their families.

Fourthly, the socio-economic status is more significantly related to educational attainment in Korea than in New Zealand. The egalitarian ideology of the New Zealand society is well reflected in the practice of education. School is provided free from five to nineteen years of age for every person who seeks it, and university is also virtually free to all who qualify for it. But in Korea, all schools from primary to university levels, are maintained mainly by parents, although a small portion of finance is provided to the state schools by the Government. It is therefore easily observed in Korea that the economic resources of the parents limit the educational careers of children from lower status families, especially in tertiary education. The bulk of university students are, by and large, children of well-to-do families or at least of families able to support them through school.

Thus a prediction of educational attainment based on socio-economic status is more workable in Korea than in New Zealand. In New Zealand, although parental income tends to determine university attendance, the factors such as intelligence (Havighurst et al., 1954), verbal ability (Harker, 1971) and the system of streaming in the secondary school (Baldock, 1976) are more significant in determining how far a child shall go in school, whereas in Korea, the socio-economic status of the parent directly determine the educational attainment of their children.

Finally, coeducational secondary education, which is

common in New Zealand, is considered less desirable in Korea. Primary schools in Korea are coeducational, but as boys and girls approach adolescence and begin to manifest greater interest in each other, artificial barriers to prevent interaction become correspondingly greater. Almost no opportunities for normal boy-girl relationships are available in secondary schools. Although the sexes sometimes interact at some activities outside school, contact between girls and boys in learning, working and social situations is discouraged at school.

It is a common attitude of Korean parents to think that boys-girls contact at the secondary school level interfere with their studies, encourages preoccupation with the opposite sex, and promotes juvenile delinquency and sexual immorality. Attitudes against coeducation in Korea reflects that an old attitude - the Confucian social order of men and women, **삼녀칠세부동석** (Nam Nyu Chil Se Boo Dong Suk which means a boy and a girl should not sit together after they have reached the age of seven) - still flourishes beneath many of the apparently radical features of the modern Korean society.

In New Zealand, there are two types of coeducation at high school level: those patterned on the American comprehensive high schools which are regarded by the general public as being innovative, and those, which although admit both sexes, in fact still follow the same curriculum and practices of the single-sex schools. Recently, an interesting research on the effects of coeducation on student attitudes and behaviours related to academic motivation and achievement was conducted by Jones, Shallcrass and Dennis (1972) with New Zealand secondary school students. They reported significant differences between students in single-sex schools and students of the same sex in

coeducational schools in the areas of scholarship, prestige and popularity, peer influences on behaviour, and personal goals. Major significant differences are: compared with those studying in single-sex schools, coed students (1) spend less time on "study" and more on "sports or club activities"; (2) rank "membership in the leading crowd" and "being accepted and liked by others" higher, and (3) rank "scholarship" lower.

To sum up, two different education systems in Korea and New Zealand were outlined and five features of contrasts between the two cultures were presented:

1) The Korean school is a more group-oriented and formalized environment, whereas the New Zealand school is a more friendly and more informal environment where the individual students receive more attention.

2) Moral discipline receives a greater emphasis in the Korean school than in the New Zealand school.

3) The keen competitiveness among school youngsters is more easily observed in Korea than in New Zealand.

4) The socio-economic status is more significantly related to the educational attainment in Korea than in New Zealand.

5) Co-educational secondary education is considered less desirable in Korea whereas it is common in New Zealand.

It is predictable that all these features would contribute to the shaping of different patterns of behaviour and self concept in both cultures.

IV. THE TWO DIFFERENT RELIGIOUS BACKGROUNDS

Lenski (1961), in his research on the significance of religion in social life, stressed that religion acts in a causal way and is not merely correlated with certain kinds of

human behaviours. This is consistent with Brown's (1966) conclusion that religious beliefs are categories by which people explain, interpret and cope with the natural world. Rokeach (1969) also noted that religion teaches man a distinctive system of moral values that guide man's everyday relations to others toward more humane levels than might otherwise be the case. It is therefore helpful to have a brief look at the religious backgrounds of the two cultures for our cross-cultural study on self-concept.

The Religious Background of Korea

Unlike New Zealand, many varieties of religious traditions coexist in Korea. The most important ones are: Confucianism and Buddhism, both of which have profoundly influenced the spiritual and social life of Korean people for more than sixteen centuries; Christianity, which has exerted a notable cultural and intellectual impact since its introduction in the eighteenth century; and Chun Do Kyo, which emerged during the unstable years of the nineteenth century under the Yi Dynasty. These religious traditions, meeting and interacting with one another, have together formed the religious life of the Korean people.

The complexity of these traditions is reflected in some seemingly contradictory aspects of the contemporary Korean religious situation. On the one hand, for example, Koreans appear to take little interest in religion; in the modern age, in particular, with its urbanization and industrialization, increasing numbers of people commit themselves to no specific religion. On the other hand, however, it would also appear that Koreans are very religious in a non-specific sense, judging from the great number of religious groups and from the millions

of people affiliated to one or more religions (see Table 4-2).

(TABLE 4-2) STATISTICS OF KOREAN RELIGIONS (RYU, 1976)

(AS OF APRIL, 1975)			
Religions	No. of Churches	No. of Followers	% of Total Population
Buddhism (18 sects)	5,692	11,972,930	34.2%
Confucianism	256	4,723,493	13.5
Protestantism (79)	16,039	4,019,313	11.5
Catholicism	2,319	1,012,209	2.9
Chundokyo (4)	142	815,385	2.3
*Others	592	160,000	0.5
No Religion		about 12,300,000	35.1
Total Population		about 35,000,000	100 %

*Others include Taejongkyo, Islam and Bahaism, and are based on 1972 Statistics from Korea Annual 1974.

Confucianism was first introduced to Korea in the course of the inflow of Chinese civilization which began in 108 B.C. (Lee, 1972) and, all down the centuries, has been more completely accepted by the Korean people than by the Chinese.

Confucianism, properly speaking, is not a religion but a system of moral teaching and behaviour based on the O-Ryoon (Five Fundamental Relationships), intended to govern all the relationships within the family, community and state in harmonious unity (Chang, 1972). Its basic principle for governing these relationships is a system of subordination in which each individual does his own duty in his own social situation.

Confucianism in Korea meant a system of ancestral worship, education and civil administration. With the passing of the last monarchy, the Yi Dynasty (1392-1910), which adopted it as the state religion, only the first function remained important (Yoon, 1976). However, the deeply ingrained Confucian code of conduct

and social relations is still a major factor in the way Koreans think and act, although this is becoming less so with the fragmentation of the large family system.

Confucianism made an important contribution to the life of Korean people and to the other religious traditions. It played an explicit role in the religious and ethical foundation of the Government and influenced general conceptions of social relations. It also gave the Korean people certain fundamental ideas and ideals of right, justice, and truth, as well as an integrated plan or morality with its intensive training in ethics (Clark, 1961). It exalts filial piety to the position of the highest virtue, but saps the foundations of morality by classifying women with menials and slaves. It always emphasizes the idea of the superior man or the gentle man, and encourages men to aim at becoming such. Thus it taught no higher ideal than that of the superior man; it was agnostic and atheistic in tendency, (Ryu, 1965). However it should be noted that it was Confucianism that formed the character of the Korean people.

Presently Confucianism in Korea has a total of 4,723,493 followers comprising 13.5% of the population and 11,840 priests at 256 shrines (see table 4-2).

Until the end of the fourteenth century, Korea had been a Buddhist country predominantly, but it certainly is not, in any great sense, a Buddhist country now. Nevertheless, it is unquestionable that Buddhism still has a strong influence on the culture of the Korean people all down the ages since it was first introduced in 372 A.D. (Joe, 1972).

The doctrine of Buddhism in Korea are the same as those of Mahayana (called Dai Seung, the greater vehicle, in Korean)

found in all northern Asia, which placed less importance on monastic discipline and greater importance on aspiration to the status of a Buddha, rebirth in heavenly paradise (Nirvana, called Yul Ban in Korean) and a relatively more attainable path to salvation for all people. These are embodied in the Sa Je, (四諦 the Four Noble Truths) and the Pal Jung Do (八正道 the Eight Fold Path) (Ryu, 1965).

The Sa Je, the most basic of the Buddhist teachings, are: that life is essentially suffering (Ko Je); that the cause of this suffering is craving (Jip Je); that the cessation of suffering can be brought about only by abandoning that craving (Myul Je); lastly that the way to achieve this goal (i.e., attaining Yul Ban or enlightenment) is to follow the course carefully prescribed in the Pal Jung Do, the Eight Fold Path (Do Je which is the fourth of the Sa Je). The Pal Jung Do includes Jung Kyun (Right views), Jung Sa (Right aspiration), Jung U (Right speech), Jung Up (Right conduct), Jung Yum (Right mindfulness), Jung Jung (Right efforts), Jung Myung (Right meditation) and Jung Jung Jin (Right way of Life).

Buddhism provides the Korean people with conceptions of a supernatural being, a future world, and faith, but its ethical system is weak. As a result it has collaborated with Confucianism all down the ages, giving sanctions to make even Confucian ethics operative (Chang, 1972). Thus, in actual practice, the two religions - Buddhism and Confucianism - are mixed together, and the same person would find himself subscribing to both according to the circumstances of the moment. Sometimes he takes part in the ceremonies of ancestral worship, at other times he visits a Buddhist temple for prayer.

Currently the Buddhist authorities operate some thirty educational institutes, and there are 11,973,000 (34% of the total population) Buddhist believers with 5,692 temples and 20,960 monks and nuns.

There have been other religions that have had their followers. Most of them are small in influence and numbers. The best known and most important of these is Chun Do Kyo, formerly called Tong Hak which exerted more influence than it does now. The Tong Hak or Eastern Learning Movement founded by Choi Je Woo in 1861 was more a political movement than a pure religion calling for social reforms.

Briefly, the doctrine of the Tong Hak is based on In Nai Chun (人乃天, Identity of Man and God) which expresses the unit of man and the universe, and the greatness of mankind, since it is believed that man is the summit of evolution in the universe. Practically, In Nai Chun reveals the relation between man and man, between man and matter, and between man and the whole world. It advocates equality among men, and places its emphasis on arriving at a better system of ethics for men instead of on the worship of idols. Therefore the principles of In Nai Chum oppose all traditional ordering of human relationships based on the Confucian hierarchical social order, and promote a life of liberty and equality.

In the twentieth century, Tong Hak changed its name to Chon Do Kyo which means the "Doctrine of the Heavenly Way", and became primarily a religious rather than a political force. Chun Do Kyo now has approximately 815,000 followers (2.3% of the total population), 1,550 clergymen and 142 churches across the country.

Christianity in the form of Catholicism was first

introduced to Korea in 1783, and from 1832 onwards numerous Protestant denominations also began sending preachers, medical personnel and educators over to Korea. These later missionaries were fortunate in that they met a deeply-felt need among young Koreans for modern education as a tool leading to social reforms. They quickly became identified with the progressive movements, and introduced the ideas of democracy. With its appeal directed towards intellectuals and political leaders, Christianity achieved and maintained a large degree of influence out of all proportion to its actual number of converts. Today there are some five million Christians, 14.4% of the total population, which consists of four million Protestants with 17,385 and 16,039 churches, and one million Catholics with 3,457 clergymen and 2,319 churches. Among the Protestants, Presbyterians numbered some 1,500,000, 38% of the total number of Protestants, and Methodists came next with about 801,000 (20%) believers (Korea Annual, 1974). According to a Government white paper on the religions in 1973, there are 79 protestant denominations including Presbyterian, Methodist, Baptist, the Mormon Church, the Church of England and the Salvation Army.

Both Catholic and Protestant churches run a total of 26 colleges and universities, 75 theological seminaries, 194 secondary and primary schools, and some 70 other social service organizations including hospitals, YWCA and YMCA.

There are, of course, some other religions of native origin, but they are not fully recognized by the public as having the true marks of religion, and the number of followers is also negligible. As shown in Table 4-2, some twelve million Koreans (35% of the total population) are reported to have no

religion or have no definite affiliation to any particular religion.

The Religious Background of New Zealand

New Zealand has a Christian culture which was transplanted by the mass European migration, coming mainly from Great Britain, who brought with it all the cultural and religious patterns of its origins. Therefore the Christian values have almost exclusively assisted in shaping New Zealand society and its culture.

Since Christianity has been the greatest single ideological force in the moulding of New Zealand culture, the churches have continued to play a formative role. New Zealand churches have a flavour of their own which is directly traceable to the strenuous conditions of pioneering (Hall, 1966). This is well expressed in Sinclair's statement:

"The moral attitudes of society were moulded perhaps more decisively than in Australia or the United States, by puritanical forms of Christianity and by the Evangelicalism which permeated most Christian churches last century".
(1961, P278)

Apart from the basic moral and spiritual values of Christian origin, which nearly all New Zealanders take for granted, the churches have often worked and pleaded for better conditions in areas of social need, racial tension, labour disputes and various other forms of social service (Davis, 1966).

New Zealanders, although predominantly (about 84%) Christian, are not all of one religious denomination. Throughout the history of New Zealand, members of the Church of England and the Presbyterian denominations have constituted the majority of the population, followed by Roman Catholics and members of the Methodist denominations. This reflects the traditional

religious divisions of English religious life (Mol and Reidy, 1973), though the social distinction has failed.

(TABLE 4-3) STATISTICS OF N.Z. RELIGIONS IN 1971*

Religions	No. of Adherents	%
Anglican	895,389	31.3%
Presbyterian	583,701	20.4
Catholic	449,974	15.7
Methodist	182,727	6.4
Baptist	47,350	1.7
Mormon	29,785	1.0
Brethren	25,768	0.9
Salvation Army	19,371	0.7
Other Denominations (16)	164,646	5.8
All Other Religions	55,433	2.0
No Religion	57,485	2.0
Object to State	247,019	8.6
Not Specified	103,533	3.6
Total	2,862,631	100

*From New Zealand Official Yearbook 1976

As seen in table 4-3, 31.3% of the population belonged to the Church of England, followed by Presbyterian adherents with 20.4%. Roman Catholics were over fifteen per cent. Methodists made up 6.4%. Smaller Protestant churches together constituted 5.8% and only 16% of the total population either refused to state or denied a religious affiliation to any Christian denomination.

However, it is obviously true that, in this modern age especially, there has been a change in the religious attitudes and behaviours of New Zealanders. For example, the social practice of church-going is not as prevalent as it used to be.

In spite of the fact that some 84% of the population admitted that they were Christians at the 1971 census, a large proportion of the members, in fact, did not attend church services at all. In 1926, reports showed that 53% of the Roman Catholics, 51% of the Methodists, 35% of the Presbyterians and 25% of the members of the Church of England went to church regularly. A recent study, however, reveals that only 20% of the Protestant population attend church services regularly. (These studies include adult Christians only). It is also observed that the younger generation of Christians in the major Protestant churches show strong tendencies towards making their religion more relevant to their daily lives (Mol and Reidy, 1973). These and other characteristics of religion in New Zealand have been well reviewed by several scholars including Oliver (1966), Downey (1966), Geering (1966), Mol (1968), Blaikie (1969), and Mol and Reidy (1973).

Hall (1966) argued in his book, "Portrait of New Zealand" that most New Zealanders, nowadays, regard religion as a means of maintaining moral standards and as an instrument of social betterment rather than as means of achieving deep spirituality. Sinclair (1961) also characterises the prevailing New Zealand religion as "a simple materialism".

Although New Zealanders do not take religion so seriously now as they did in the early settlement period, Christianity still stands today in the minds of most New Zealanders (84% of the population) as the embodiment of their ideals of life. In conclusion, as Downey wrote:

"Religion in New Zealand of course does not mean what it meant in the lives of our grandfathers or of their fathers before them. Religion has been just one of the parts of our lives that we have accommodated to fit our state of affluence.

This is an accommodation of forms and of attitudes. It does not necessarily affect the basic reality of a religious sense, and of a Christian commitment. Like all Christians at all times New Zealanders have a long way to go to achieve perfection either personally or as a society. But in itself this does not show that we are a non-Christian people". (1966, P36)

CHAPTER FIVE

HYPOTHESES

As explained earlier, this study is exploratory, not because of the methodology used, but because of the subject matter with which it deals. Besides it is a fact-finding (survey type) research rather than a study exploring cause and effect relationships. Therefore, comprehensive general hypotheses were formulated from the considerations of chapters 2 and 4:

1) Both Korean and New Zealand young adults have sex-role stereotyped self concepts (present), and this pattern of sex differences in self concepts is more distinctive among Korean young adults than among New Zealand young adults.

2) Both Korean and New Zealand young adults with Christian backgrounds show more positiveness in moral-social oriented, conservative self concepts, whereas non-believing young adults show more positiveness in achievement-competence oriented, non-conservative self concepts. This pattern of religion-based differences is more distinctive among Korean young adults than among New Zealand young adults.

3) During the period of young adulthood, the self concepts of both Korean and New Zealand young adults show a general increase in positiveness with the increase in education. This pattern of educational level differences is more distinctive among Korean young adults than among New Zealand young adults.

4) Both Korean and New Zealand young adults have sex-role stereotyped ideal self concepts, and this pattern of sex

differences in ideal self concepts is more distinctive among Korean young adults than among New Zealand young adults.

5) Both Korean and New Zealand young adults with Christian backgrounds show more positiveness in moral-social oriented, conservative ideal self concepts, whereas non-believing young adults show more positiveness in achievement-competence oriented, non-conservative ideal self concepts. This pattern of religion-based differences is more distinctive among Korean young adults than among New Zealand young adults.

6) During the university period, both Korean and New Zealand young adults show a decrease in the positiveness of their ideal self concepts. This pattern of educational level differences in ideal self concepts is more distinctive among Korean young adults than among New Zealand young adults.

7) In Korea and New Zealand, young adults (senior high school students) with lower SES show more positiveness in moral-social oriented self concepts, whereas young adults (senior high school students) with higher SES show more positiveness in achievement-competence oriented self concepts. This pattern of social class differences is more distinctive among Korean young adults than among New Zealand young adults.

8) Among Korean and New Zealand young adults, the pattern of subjective change in self concepts from the past (two years ago) through the present to the future (two years ahead) is generally characterized by an increasing positiveness. This pattern of subjective change in self concepts is more distinctive among Korean young adults than among New Zealand young adults.

9) The factor structures of the actual self concepts of the Korean and New Zealand young adults are similar.

10) The factor structures of the ideal self concepts of the Korean and New Zealand young adults are similar.

For Hypotheses 9 and 10, effects of sex, religious backgrounds, social class backgrounds and educational levels will be examined.

CHAPTER SIX

RESEARCH DESIGN

I. LOCATION

Since this is a cross-cultural study, the fields of research are in two different societies: Korea and New Zealand. Our concern is with the young adults aged between sixteen to twenty four years old, attending high school or university in metropolitan areas; therefore, Seoul (Korea) and Christchurch (New Zealand) were selected as comparable fields of study, as they are the biggest industrialized cities in Korea and on the South Island of New Zealand. They were readily available to the author who originally came from Seoul, and has been undertaking this study in Christchurch since November, 1973.

II. SUBJECTS

939 students in Korea and 943 students in New Zealand served as subjects for the present study. They were divided into three groups as shown in Table 6-1.

(TABLE 6-1) CHARACTERISTICS OF THE TOTAL SAMPLE

GROUPS	DESCRIPTION	N. Z.			KOREA		
		M.	F.	Total	M.	F.	Total
GROUP I	Senior High School Students (16 years - 18 years)	205	158	363 (16.65)*	195	154	349 (17.09)
GROUP II	Junior University Students (18 years - 21 years)	225	103	328 (20.20)	208	93	301 (20.11)
GROUP III	Senior University Students (21 years - 24 years)	186	66	252 (23.00)	196	93	289 (23.34)
TOTAL		616	327	943	599	340	939

* indicates mean age of the group in years.

NEW ZEALAND GROUP I

Following the advice of Professor Gregson, supervisor of this study, the author chose C High School, which is located in one of the best residential areas of the Christchurch metropolitan area, as a school for students with an upper socio-economic background, and A High School, located in the area where there are many state rental houses, as a school for students with a lower socio-economic background. The occupation of fathers for both schools were coded for status using the 7-point scale devised by Davis (1974) for the prestige ranking of occupations in New Zealand (scored 1-7 in the direction of decreasing prestige). Fathers in C High School had occupations of higher prestige (Median = 4, $M = 3.96$, $Sd = 1.50$) than did fathers in the A High School (Median = 5, $M = 5.20$, $Sd = 1.14$), and the difference in means was statistically significant ($P < .01$). Davis' scale has a correlation of .84 with the Stewart - Corringe scale (Stewart and Corringe, 1977) which is the most up-dated index at present.

The questionnaire was administered to all senior students enrolled in Forms 5, 6 and 7 of both schools. Of 259 and 156 questionnaires given in C and A high schools respectively, 230 and 133 questionnaires were usable. The remaining 51 questionnaires were not usable, because some students did not meet the criteria used in selecting the sample (e.g., age, nationality), and some did not complete the questionnaire or showed poor co-operation. Students with New Zealand nationality but had not lived in New Zealand continuously for the last two years were also eliminated from the study.

Using the personal information gathered from the questionnaire, students were classified into several subgroups according

to sex and religious variables as shown in Table 6-2 for comparison with their Korean counterparts.

(TABLE 6-2) NEW ZEALAND AND KOREAN HIGH SCHOOL SAMPLES

Criteria for Division	N.Z.			Korea		
	Upper-Class School	Lower-Class School	Total	Upper-Class School	Lower-Class School	Total
Male (M)	121	84	205	98	97	195
Female (F)	109	49	158	79	75	154
Total	230	133	363	177	172	349
Christian (XN)	176	91	267	75	69	144
Non-Believer (NB)	54	42	96	89	83	172
Buddhist (BD)	-	-	-	13	20	33
Total	230	133	363	177	172	349
M-XN	84	56	140	38	40	78
F-XN	92	35	127	37	29	66
M-NB	37	28	65	53	46	99
F-NB	17	14	31	36	37	73
M-BD	-	-	-	7	11	18
F-BD	-	-	-	6	9	15
Total	230	133	363	177	172	349

KOREAN GROUP I

On the advice of Professor Jeon of the Korea University, Seoul, the author chose two girls high schools and two boys high schools as sources of subjects, since nearly all the high schools in Korea are not co-educational. In the process of choosing schools, socio-economic and environmental factors were taken into account. Of the four schools two (one girls' and one boys') were attended by mostly college-bound students, and two (one girls' and one boys') were vocational high schools attended by students whose parents could not afford an expen-

sive university education for their children. Therefore, students attending academic (college-bound) schools are generally considered as having a higher socio-economic background than those attending vocational high schools.

The occupations of fathers were coded for status using the scale (Appendix 4) temporarily devised for the Korean high school samples on the basis of father's occupation and educational level by CHOI and five experienced high school teachers (1976) for the prestige ranking of occupations in Korea (scored 1-6 in the direction of decreasing prestige). Fathers in the two vocational high schools had occupations of lower prestige (Median = 5, $M = 4.78$, $Sd = 1.15$) than did fathers in the two academic high schools (Median = 3, $M = 2.62$, $Sd = 0.79$), and the difference in means was also statistically significant ($P < .01$)

In each of these schools, two classes (high school grades 2 and 3 with an age range from 16 to 18 years) were randomly selected, and were asked to respond to the questionnaire. The total number of boys who responded to the questionnaire was 218, while that of girls was 172. Of these 195 boys and 154 girls were used for the present study. They are shown in detail in Table 6-2 with the New Zealand high school samples.

NEW ZEALAND GROUP II AND GROUP III

The New Zealand university subjects were randomly selected from the total population of 5,174 full-time students of the University of Canterbury in the academic year 1975.

With the co-operation of Mr R. Roy, the author was allowed access to the official records of the University of Canterbury, and from the records, 470 junior and 468 senior students were randomly drawn by the systematic sampling method

using random numbers (Games and Klare, 1967). Then the questionnaires were posted to the subjects of both groups at two different times requesting them to return the completed questionnaires within a three-week period.

The choice of subjects for each group was determined by the following criteria.

- 1) They must be New Zealanders.
- 2) They must be unmarried.
- 3) They must be aged between 18 - 21 for the junior group, and between 21 - 24 for the senior group.
- 4) They must be full-time students.

It was intended to have equal numbers in each group and the ratio of two to one between males and females. However, difficulties were encountered in sampling and in the postal administration of the questionnaire. Difficulties occurred mainly with the senior group. For example, among the senior group which includes some post-graduate students, male students heavily out-numbered the females. Thus selection of 58 senior female students of the Christchurch Teacher's College who were currently doing some courses at the University of Canterbury was unavoidable.

342 and 292 questionnaires were returned by the junior and the senior groups, and these made return rates of 72.8% and 62.4%. Of these, 54 were eliminated from the study due to changes in their marital status (especially in the female senior group), refusals, and the poor co-operation of subjects. The remaining 328 and 252 questionnaires made up the New Zealand university samples and were used for analysis. They are shown in Table 6-3 together with the Korean university groups.

(TABLE 6-3) NEW ZEALAND AND KOREAN UNIVERSITY SAMPLES

Criteria for Division	N.Z.		Korea	
	Group II*	Group III**	Group II	Group III
Male (M)	225	186	208	196
Female (F)	103	66	93	93
Christian (XN)	201	140	59	66
Non-Believer (NB)	127	112	201	195
Buddhist (BD)	-	-	41	28
M-XN	140	101	25	34
F-XN	61	39	34	32
M-NB	85	85	154	141
F-NB	42	27	47	54
M-BD	-	-	29	21
F-BD	-	-	12	7
Total	328	252	301	289

* Junior University Students ** Senior University Students

KOREAN GROUP II AND GROUP III

The Korea University from which the Korean samples were drawn had a roll of about 8,000 in 1976 within its seven faculties : Arts, Political Science, Commerce, Law, Science and Engineering, Agriculture and Forestry, and Medical Science, which, with the exception of Medical Science, are quite comparable with those of the University of Canterbury which has about 7,000 students and seven faculties including Arts, Science, Engineering, Commerce, Law, Music and Fine Arts, and Forestry. The main differences between the two universities are:

- 1) The University of Canterbury is a state university established in 1873, whereas the Korea University is one of the oldest private universities established in 1905.

2) Of 7,000 students of the University of Canterbury, 70% (4,900) were full-time students, whereas 92% of the total students of the Korea University were full-time, and

3) Due to the difference in the length of degree programme between the two universities, it was necessary to include some post-graduate students in the New Zealand senior group, whereas they were not included in the Korean senior group. In Korea, a minimum of four years is required for the first degree.

To obtain as much comparability between the university samples of the two countries as possible, the author originally intended to adopt the same selection procedure as in the New Zealand university samples, using the official records of the registrar of the Korea University. However, it was not possible to use the records, because of university policy.

Thus subjects were obtained from five different faculties including Arts, Commerce, Science and Engineering, Medical Science, and Law, and the questionnaires were administered to them during the normal classroom session. Therefore, it must be emphasized that these groups were availability samples and obviously can not be taken as representative of the Korea University population in the same sense that the New Zealand university samples were representative of the total full-time student population of the University of Canterbury in terms of age and sex.

The following is a list of fields of study of the Korean university samples with their numbers.

(TABLE 6-4) LIST OF FIELDS OF STUDY OF KOREAN UNIVERSITY SAMPLES

Fields	Junior M	Group F	Senior M	Group F
Arts	30	48	20	53
Law	62		55	
Commerce	46		48	
Science and Engineering	70		73	
Medical Science		45		40
Total	208	93	196	93

The Korean University samples are also shown in Table 6-3 for comparison with the New Zealand University samples.

III. QUESTIONNAIRE

The Self Concept Questionnaire (see Appendices 1 and 2) used in the present study is derived from Rogers' (1951) idea of self, which implies that many single perceptions standing in relation to each other exist for the same individual. Thus every statement an individual makes in evaluating himself can be considered a sample of his concept of himself. The questionnaire consists of four parts which relates to different aspects of the way the subject thinks about himself:

Part 1 : Present self concept as perceived at present,

Part 2 : Changes in the self concept in the last 2 years,

Part 3 : Changes in the self concept in the next 2 years, and

Part 4 : Ideal self as the individual would like to be.

Each part contains the same thirty items, equally divided into two subscales, Personal Self and Social Self, which are based on Rogers' Self Theory: "All perceptions of the qualities, abilities, impulses and attitudes of the person, and all perceptions of himself in relation to others" (1947, p364).

Wyllie (1968) also differentiated between social self concept and private self concept, although her social self concept does not exactly correspond to that of Rogers'. Two lists of fifteen alphabetically arranged (in the English version) Personal and Social self concepts are considered to be reasonably comprehensive and valid to cover a fairly wide spectrum of such aspects of the self concept. They were distilled from various sources and reviewed by several psychologists from both New Zealand and Korea (see Chapter 3 for details).

Each item accompanied by two short descriptive adjectives or phrases in parentheses is presented to the subject and he is requested to arrange a score along a subjective continuum ranging between -50 and +50. This is done for each of the four parts. The scores of Part 1 and Part 4 are taken as direct measures of Present (Actual) Self Concept and Ideal Self Concept. The sum of scores in each item from Part 1 and Part 3 is taken as Future Self Concept. To obtain his Past Self Concept, the subtraction of each item score in Part 2 from each item score in Part 1 was made.

In each part, the Personal Self was measured first before the Social Self and there was no time limit imposed on the respondent. The time taken to administer the questionnaire in both countries varied from 20 to 40 minutes, with most subjects completing them in twenty five to thirty minutes.

Despite the fact that respondents generally consider the task of arranging his standing on a subjective continuum with such a wide range as between -50 and +50 to be a difficult one, it is clear from Table 6-5 that the overall reliabilities are on the whole satisfactory for research purposes. In the present study, a test-retest reliability coefficient of each

(TABLE 6-5) FREQUENCY DISTRIBUTION OF RELIABILITIES OF THE 30 ITEMS

Reliability	Past		Present		Future		Ideal	
	N.Z.	KOR	N.Z.	KOR	N.Z.	KOR	N.Z.	KOR
.90 - .99			3		3		2	
.80 - .89	6	2	9	6	9	2	10	1
.70 - .79	9	4	9	10	10	4	12	7
.60 - .69	8	9	5	7	6	10	5	10
.50 - .59	3	7	2	4	1	9	1	6
.40 - .49	4	4	2	3	1	2		5
.30 - .39		2				3		1
.20 - .29		2						
Scale Types	.71		.79		.80		.81	
		.60		.73		.62		.64

N.Z. N=36, KOREA N=41 Reliabilities were calculated by the Pearson Product-Moment Method (Anastasi, 1970).

question item for four scale types (Past, Present, Future and Ideal Self Concept Scales) was individually calculated with the Pearson Product-Moment method (Anastasi, 1970) for both countries (see Appendix 6). The subjects were 36 university students in New Zealand and 41 high school students in Korea, and the interval from test to retest was six weeks. The reliability coefficients for the Past, Present, Future and Ideal Self Concept Scales with the New Zealand subjects are .71, .79, .80 and .81 respectively, suggesting that the Past Scale is the least reliable and the other three scales are equally reliable. The reliability coefficients for the same four scales with the Korean subjects are lower than those of the New Zealand counterparts, and .60, .73, .62 and .64 respectively, suggesting that the Present scale is, unlike in New Zealand subjects, the most reliable and the remaining scales are not substantially different in their reliabilities from one another. The fact that reliabilities obtained from the New Zealand subjects are gener-

ally higher than those obtained from the Korean subjects seems to result mainly from the two different testing conditions — individual testing by the author in New Zealand, and group testing in a large class room by the class room teacher in Korea — and two different characters of the groups on which reliability was measured — the university students in New Zealand, and the high school students in Korea.

IV. COLLECTION OF DATA

N.Z. GROUP I AND ALL KOREAN GROUPS

With the fullest co-operation of Mr R.A. Chapman (Principal of C High School) and Mr A. Gilchrist (Headmaster of A High School), the author was able to administer the questionnaires to all senior students enrolled in Forms 5, 6 and 7 of the two New Zealand high schools. The testing took place in a big hall with the assistance of their form-masters in October, 1974.

In Korea, the questionnaires were administered to all the Korean subjects during a regular classroom session in Spring, 1976 by one of the author's colleagues under the supervision of Professor Jeon of the Psychology Department of the Korea University.

Before supplying the subjects with the questionnaires, it was verbally explained to them that the research project was a study on the self concept which was part of a planned cross-cultural study between Korea and New Zealand. Co-operation was requested with the clear understanding that information gathered from the questionnaires is strictly confidential and would be used only for scientific purposes. Then the subjects were asked to complete items concerning personal details such as age, sex, marital status, religion, etc., to read carefully the instruction

of each part illustrated with three examples, and then to proceed with all question items without omitting any item. Interpretation of the items by the administrators was not allowed, so that different interpretations on ambiguous items, if any, by different administrators would be avoided. Approximately 30-40 minutes of each class period were used in administering the questionnaires which were then completed anonymously.

N.Z. GROUP II AND GROUP III

The questionnaire was posted in May, 1975 to 468 senior university students, and in August, 1975, to 470 junior university students. A cover letter (Appendix 5) was sent along with the questionnaire and a stamped envelope for return, explaining its purpose, and provision was made for anonymity in replies.

Of these, 292 senior students and 342 junior students returned their questionnaire within the three week period making return rates 62.4% and 72.8% respectively.

V. TREATMENT OF DATA

Altogether 1,882 questionnaires were used in the analysis. The scores on the questionnaire were transferred to data sheets and then punched onto computer cards.

To analyze the data, MANOVA (multivariate analysis of variance) and Principal Components Analysis computer programmes were used on a Burroughs 6718 at the Computer Centre, the University of Canterbury. The MANOVA programme was originally devised by Dr E. Cramer of the University of North Carolina and has been modified by Professor R.A.M. Gregson of the University of Canterbury to run on the Burroughs Computer. The Principal Components Analysis programme was also modified by Professor Gregson to run on the same computer, from an original version in

the IBM SSR package.

A few things in the treatment of data need to be explained:

1) Although the 30 items are divided into two subscales, the Personal Self and the Social Self in the Questionnaire, they were treated together in both the MANOVA and the Principal Components Analyses.

2) As the number of Buddhists in the Korean subgroups was not large enough, they were not included in the analyses of the religion-based differences. However, they were included in the MANOVA analyses of changes in self concepts and in all Principal Component analyses for the Korean groups.

3) Ideal self concept of the high school student groups were not included in both the MANOVA and the Principal Components analyses, as that scale was not available for all the subjects concerned in the early part of the study.

CHAPTER SEVEN

RESULTS AND DISCUSSION (I) : THE MANOVA ANALYSES

This study was planned to investigate the differences that may exist in the self concepts of various groupings of young adults attending high school or university in these two cultures - Korea and New Zealand. The various groupings used in this study are based on the following factors :

Factor E : educational level - senior high school, junior university and senior university students.

Factor X : sex - male and female.

Factor R : religious background - Non-believer and Christian

Factor C : social class background (high school level only) - upper class and lower class.

Factor S : scale types - past, present, future and ideal self concepts (the last item applies to university level only).

Interaction effects will be denoted by the pairing of these component factors, e.g., XR, EX.

To determine whether significant differences in self concepts were found among different groups, a series of the MANOVA analyses (including univariate F tests) had been carried out on the data obtained on the thirty self concept items. These items were used as criteria variables in the MANOVA analyses.

I. MANOVA ANALYSES OF ACTUAL SELF CONCEPT

The mean scores and standard deviations for 12 Korean groups (3E x 2X x 2R) and for 12 New Zealand groups on the 30 variables of the present self concept are shown in Appendices

7-1 and 8-1 respectively. The 12 groups in each culture are:

- 1) High school male Non-believers (HS-M-NB),
- 2) High school male Christians (HS-M-XN),
- 3) High school female Non-believers (HS-F-NB),
- 4) High school female Christians (HS-F-XN),
- 5) Junior university male Non-believers (JU-M-NB),
- 6) Junior university male Christians (JU-M-XN),
- 7) Junior university female Non-believers (JU-F-NB),
- 8) Junior university female Christians (JU-F-XN),
- 9) Senior university male Non-believers (SU-M-NB),
- 10) Senior university male Christians (SU-M-XN),
- 11) Senior university female Non-believers (SU-F-NB) and
- 12) Senior university female Christians (SU-F-XN).

Table 7-1 shows the range of SDs for the groups of both cultures. From the table, it can be seen that SDs for Korean groups generally are slightly greater than those for the New Zealand groups. It is also found that the range of SDs for the Korean groups are slightly larger on 20 of the 30 items than for the New Zealand groups. Another interesting finding from table 7-1 is that in both cultures, the SD on the item "Religious" is greater than those on any other items. This indicates that the scores on the "Religious" item showed considerably more spread than those on the other items, and this was more so for the New Zealand groups (25.97~31.01) than for the Korean groups (18.44~30.78).

(TABLE 7-1) RANGE OF SDs ON PRESENT SELF CONCEPT SCALE FOR THE 12 GROUPS
(3E x 2X x 2R)

ITEMS	RANGE OF SDs OF THE 12 KOREAN GROUPS	RANGE OF SDs OF THE 12 N.Z. GROUPS
Active	18.03 - 28.72	16.32 - 25.70
Ambitious	19.54 - 25.57	15.55 - 23.82
Capable	14.36 - 20.58	12.32 - 17.78
Clean	17.25 - 22.76	16.47 - 21.45
Courageous	15.02 - 23.47	13.62 - 20.38
Creative	13.23 - 23.16	15.89 - 23.00
Healthy	19.98 - 26.59	18.28 - 24.85
Honest	17.88 - 23.58	14.40 - 21.63
Intelligent	13.88 - 21.79	12.41 - 19.02
Optimistic	16.45 - 25.74	15.75 - 25.89
Patient	16.21 - 27.22	18.10 - 25.59
Pleasant	18.39 - 23.53	13.44 - 25.82
Rational	15.08 - 24.23	15.02 - 22.05
Religious	18.44 - 30.78	25.97 - 31.01
Self-Controlled	13.94 - 25.03	17.22 - 22.39
Leadership	15.79 - 25.40	16.42 - 25.62
Considerate	14.09 - 23.85	12.20 - 20.19
Helpful	12.64 - 21.96	11.32 - 21.27
Independent	17.65 - 26.54	17.28 - 24.35
Loving	15.64 - 23.14	14.42 - 22.82
Obedient	17.19 - 25.44	15.23 - 23.11
Open-minded	15.13 - 23.05	14.76 - 23.55
Pliable	15.94 - 24.80	13.64 - 25.28
Polite	15.37 - 21.20	15.04 - 19.15
Popular	14.65 - 22.34	11.39 - 20.65
Progressive	14.86 - 23.05	10.60 - 18.95
Responsible	13.87 - 21.15	11.40 - 20.78
Self-Revealing	21.32 - 27.18	18.32 - 24.13
Sociable	14.93 - 26.69	14.47 - 22.08
Successful	13.50 - 23.70	14.87 - 17.92

To test the significance of various combination of groupings, a MANOVA was performed for each culture and the results are summarized in Table 7-2 and Table 7-3.

From tables 7-2 and 7-3, it is clear that in both cultures, there were significant effects of educational level (Factor E), sex (Factor X) and religious background (Factor R) on the Present Self Concept Scale, with all Wilks Lambda P values being less than .001. Hence when these 12 groups were regrouped

(TABLE 7-2) SUMMARY OF THE RESULTS FROM THE MANOVA FOR PRESENT SELF CONCEPTS
OF KOREAN GROUPS

FACTOR	NO. OF ROOTS	RANGE OF F VALUES	NO. OF SIGNIFICANT ROOTS (P LEVEL)	RANGE OF CANONICAL CORRELATION	REFERENCE FOR UNIVARIATE F TESTS
Educational Level (E)	2	2.161 - .786	1 (.001)	.347 - .167	Appendix 7-2
Sex (X)	1	3.111	1 (.001)	.324	" 7-3
Religion (R)	1	10.993	1 (.001)	.541	" 7-4
EX	2	1.592 - 1.202	1 (.003)	.267 - .205	" 7-5
ER	2	1.379 - .832	1 (.031)	.263 - .171	" 7-6
XR	1	.601	Nil	.149	" 7-7
EXR	2	.894 - .879	Nil	.185 - .176	" 7-8

(TABLE 7-3) SUMMARY OF THE RESULTS FROM THE MANOVA FOR PRESENT SELF CONCEPTS
OF N.Z. GROUPS

FACTOR	NO. OF ROOTS	RANGE OF F VALUES	NO. OF SIGNIFICANT ROOTS (P LEVEL)	RANGE OF CANONICAL CORRELATION	REFERENCE FOR UNIVARIATE F TESTS
Educational Level (E)	2	3.527 - .670	1 (.001)	.426 - .145	Appendix 8-2
Sex (X)	1	7.332	1 (.001)	.443	" 8-3
Religion (R)	1	8.791	1 (.001)	.476	" 8-4
EX	2	1.152 - .875	Nil	.215 - .165	" 8-5
ER	2	.975 - .743	Nil	.199 - .153	" 8-6
XR	1	.651	Nil	.146	" 8-7
EXR	2	.722 - .645	Nil	.163 - .143	" 8-8

according to the three main factors (educational level, sex, and religious background), definite differences were found among the new subgroups. They differed significantly from each other along one dimension of the one or two dimensions analyzed (number of roots in Tables 7-2 and 7-3). This relates to the testing of Hypotheses 1, 2 and 3.

It is also found from the above tables that there were

significant interaction effects of EX (educational level x sex, Wilks Lambda $P < .003$) and ER (educational level x religion, Wilks Lambda $P < .031$) for Korean groups, but there were no significant interaction effects of any combination of factors for New Zealand groups. The detailed MANOVA analyses and the univariate F tests for all 30 criteria variables are shown in appendices as indicated in the last column of Tables 7-2 and 7-3.

To examine the effects of the three main factors more closely, mean scores of the 30 variable for the 12 groups in each of the two cultures (Appendices 7-1 and 8-1) were pooled together by sex, by religion and by educational level. The results of the univariate F tests on these data will be discussed in detail under separate headings.

I(i). SEX DIFFERENCES IN ACTUAL SELF CONCEPTS - TEST OF HYPOTHESIS 1

Table 7-4 presents the means of rating scores on the 30 variables of the Present Self Concept Scale for male and female subjects in both cultures and Figure 7-1 shows this graphically.

As seen in Table 7-4 and Figure 7-1, the findings can be summarized as follows:

Among Korean young adults:

1) Females rated themselves significantly higher than males on the items Clean ($P < .002$), Pleasant ($P < .05$) and Religious ($P < .063$).

2) Males rated themselves significantly higher than females on the items Ambitious ($P < .001$), Capable ($P < .001$), Courageous ($P < .001$), Creative ($P < .001$), Active ($P < .05$), Intelligent ($P < .01$), Leadership ($P < .01$), Self-controlled ($P < .05$), Independent ($P < .05$), Progressive ($P < .001$), Success-

(TABLE 7-4) MEANS OF ACTUAL SELF CONCEPTS FOR MALES AND FEMALES

ITEMS	KOREA			N.Z.		
	MALE (N=599)	FEMALE (N=340)	DIFF (M-F)	MALE (N=616)	FEMALE (N=364)	DIFF (M-F)
Active	10.93	7.66	3.27*	18.78	14.39	4.39***
Ambitious	20.66	15.65	5.01***	13.56	15.74	-2.18
Capable	14.78	9.67	5.11***	17.13	17.00	0.13
Clean	15.68	20.67	-4.99**	13.90	20.13	-6.23***
Courageous	7.64	3.25	4.39***	4.69	3.00	1.69
Creative	11.95	8.17	3.78***	9.74	10.34	-0.60
Healthy	14.92	16.87	-1.95	20.78	15.37	5.41***
Honest	23.30	22.70	0.60	22.05	21.88	0.17
Intelligent	16.09	13.01	3.08**	19.08	17.30	1.78
Optimistic	13.07	13.55	-0.48	13.14	14.01	-0.87
Patient	17.46	17.94	-0.48	9.25	8.87	0.38
Pleasant	12.25	16.22	-3.97*	13.16	16.60	-3.44*
Rational	11.81	10.21	1.60	15.50	8.33	7.17***
Religious	-11.05	-5.94	-5.11	-7.80	-1.06	-6.74***
Self-Controlled	13.43	9.92	3.51*	13.32	8.09	5.23***
Leadership	5.78	1.86	3.92**	11.21	5.45	5.76***
Considerate	21.14	18.73	2.41	16.82	17.78	-0.96
Helpful	20.74	17.65	3.09*	12.22	16.39	-4.17***
Independent	18.05	15.04	3.01*	18.39	17.32	1.07
Loving	17.83	14.02	3.81*	13.41	18.67	-5.26***
Obedient	14.03	12.97	1.06	5.62	6.22	-0.60
Open-Minded	11.52	8.92	2.60	19.14	20.67	-1.53
Pliable	14.39	11.24	3.15*	11.83	14.29	-2.46
Polite	20.55	20.82	-0.27	15.91	16.17	-0.26
Popular	9.44	6.88	2.56*	9.32	9.26	0.06
Progressive	12.06	5.95	6.11**	11.10	10.26	0.84
Responsible	23.98	21.43	2.55	18.67	19.56	-0.89
Self-Revealing	5.80	4.66	1.14	2.23	3.00	-0.77
Sociable	7.02	6.69	0.33	10.02	16.24	-6.22***
Successful	15.49	11.86	3.63**	7.42	5.53	1.89*

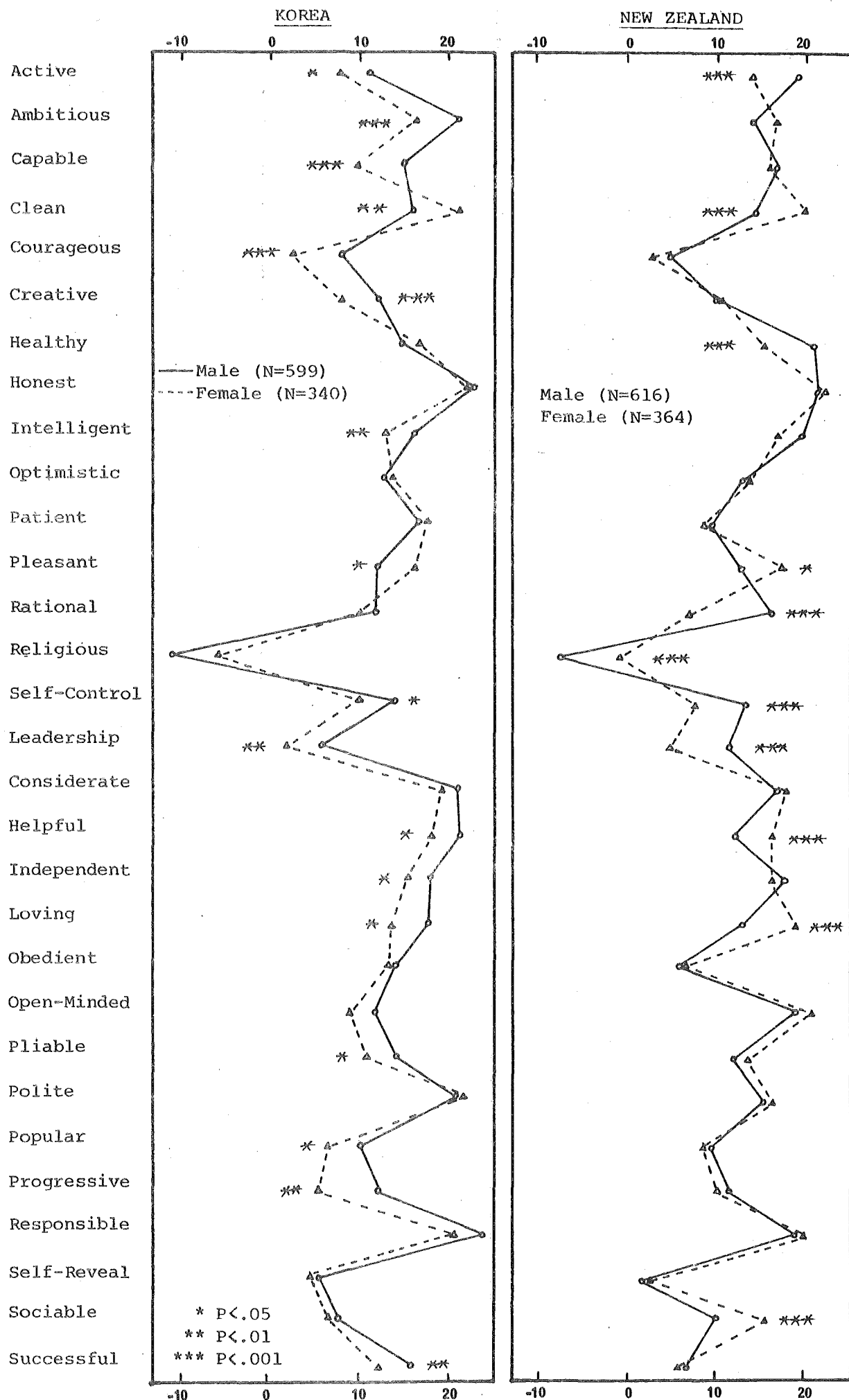
*P < .05 ** P < .01 *** P < .001

ful ($P < .01$), Responsible ($P < .053$), Helpful ($P < .02$), Loving ($P < .005$), Popular ($P < .05$), Pliable ($P < .05$), Open-minded ($P < .054$).

3) Mean scores on Healthy, Optimistic, Patient and polite were not statistically different between males and females, but differences were in favour of females.

4) The items Rational, Considerate, Obedient, Sociable

(FIGURE 7-1) ACTUAL SELF CONCEPTS OF MALE AND FEMALE GROUPS



and Self-revealing were also not found to differentiate statistically between males and females, but differences were in favour of males.

Among New Zealand young adults:

1) Females rated themselves significantly higher than males on the items Clean ($P < .001$), Pleasant ($P < .02$), Religious ($P < .001$), Helpful ($P < .001$), Loving ($P < .001$) and Sociable ($P < .001$).

2) Males rated themselves significantly higher than females on the items Active ($P < .001$), Healthy ($P < .001$), Rational ($P < .001$), Self-controlled ($P < .001$), Leadership ($P < .001$) and Successful ($P < .05$).

3) The items Ambitious, Creative, Responsible, Optimistic, Pliable, Polite, Considerate, Open-minded, Obedient, and Self-revealing were not found to differentiate significantly between males and females, but differences were in favour of females.

4) The items Capable, Courageous, Intelligent, Independent, Progressive, Honest, Patient and Popular were also not found to differentiate statistically between males and females, but differences were in favour of males.

From the above results, it can be stated that both Korean and New Zealand young adults do not show a clear-cut pattern of sex-role stereotypic self concepts as seen in many studies reviewed earlier. For examples, the items Ambitious, Creative, Responsible, Capable, Courageous, Intelligent, Independent and Progressive have generally been considered as typical male-valued stereotypic traits (Broverman et al., 1972), but the present study indicates that they did not significantly differentiate males from females among New Zealand young adults. On the contrary, New Zealand females rated themselves even more

Ambitious, Creative and Responsible than did the males, although the differences of mean scores between the sexes on these items were not statistically significant. Accordingly, the self concepts of New Zealand males were also found to be less "masculine" (defined as higher scores on typical male-valued stereotypic traits) than the traditional sex-role pattern. Thus the self concepts of New Zealand young adults can be characterized as less sex-role stereotyped than those found with American young adults in the studies by Rosenkrantz et al. (1968), Elman et al. (1970) and Carlson and Levy (1968), but are consistent with the findings of O'Leary and Depner (1975) in which female university students perceived themselves as significantly brighter and more responsible than males.

However, this trend, especially the move towards the incorporation of male-valued stereotypic traits into the self concepts of females, can not be interpreted as a shift away from the positively-valued characteristics of the female stereotype; instead it can be regarded as, in Steinmann's (1963) terms, a trend towards "self-orientation" or "self fulfilment" through the maximization of the women's potential rather than through fulfilling the "other-oriented" needs. As seen in Table 7-4, New Zealand females retained female-valued stereotypic traits by perceiving themselves as significantly Cleaner, more Pleasant, Religious, Helpful, Loving and Sociable than males. Therefore it can be concluded that self concepts of New Zealand young adults are generally differentiated between males and females along a dimension of female-valued stereotypic traits. This pattern of sex differences in a broad way supports Hypothesis 1 with regard to the self concepts of New Zealand young adults.

With regards to sex differences in the self concepts of Korean young adults, 23 of the 30 items were found to be in favour of males with mean scores of 15 items being significantly higher than those for female groups. These included most of female-valued stereotypic traits (except Religious, Clean and Pleasant) such as Helpful, Loving, Considerate, Popular, Self-revealing, Obedient and Sociable, as well as all of the male-valued stereotypic traits. These findings are not comparable with any of the studies reported earlier and thus seem to indicate that as implied in Chapter 4, there exists a different sex-role expectation and pattern in Korean society from that of Western society in general. Unlike in New Zealand society, the social and experiential worlds of men and women are more clearly distinguished in Korean society. Women, for example, spend most of their life mainly to children and other family members and usually do not take outside work. Thus Korean society typically has no formal positions for women other than domestic and maternal role. To borrow an expression from Rosenblatt and Cunningham (1976), perhaps female dominance gets expressed only in relation with children and other females within a community. Furthermore, women's status has been generally considered inferior to men's status according to the Confucian ideology of five fundamental human relationships. Therefore it seems to be quite natural for Korean female young adults to have generally less-positive self concepts than that of Korean male young adults even though as high school or university students, they tend to be critical of traditional social norms and conventions.

Although the Korean sex-role pattern as revealed by this study is a male-dominated one, the facts, that (1) Korean female

young adults perceived themselves as Cleaner, more Pleasant, and more Religious than males, and (2) Korean male young adults rated themselves higher than females on the competence-oriented items (Broverman et al., 1972), indicate that the Korean sex-role pattern is, in fact, basically not very different from the Western sex-role pattern. The finding here, therefore, is generally congruent to Hypothesis 1 as regards the self concepts of Korean young adults.

Comparison of the results of both cultures shows that there were notably fewer items showing significant sex differences in self concepts among New Zealand young adults (12 items) than among Korean young adults (20 items including Religious, Considerate and Open-minded with $P < .06$). This indicates that traditional sex-role stereotypic self concepts are being far more frequently challenged and they change more rapidly among New Zealand young adults than among Korean young adults. This phenomenon clearly reflects the characteristics of New Zealand culture such as the egalitarian ideology that underlies their social structure, economic changes that have created new roles for women, more educational and job opportunities for women, the co-educational system in schools, and the more liberated attitude towards women's position in family and in society.

It is generally believed that despite the apparent fluidity of sex role definition in modern society, pervasive and persistence sex-role stereotypes still exist, and in fact they are often accepted implicitly and uncritically to the extent that they are incorporated into the self concept of both men and women. Hence it was postulated that sex differences in self concepts would exist among young adults of the two

cultures along a dimension of stereotypic sex-role patterns, and because of the nature of the two different cultures, it was also postulated that sex differences in self concepts in relation to stereotypic sex-role pattern would be greater for Korean young adults than for New Zealand young adults. These postulations, as shown in the results of our study, are proved to be valid.

The data in this study, moreover, showed that both the sex and the cultural factors are at work in the definition of the sex role stereotypes of males and females. In both Korea and New Zealand, these sex role stereotypes are clearly incorporated into the self concepts of young adults.

Among Korean young adults, males perceived themselves more positively than females on most of the personal-competence and social-other oriented self concept items except on the few feminine items such as Clean, Pleasant and Religious. This indicates that Korean male and female young adults clearly perceived themselves as differing according to a Korean-styled male-dominated sex-role pattern.

However, it is rather surprising to find that although our Korean subjects are young people with a relatively high educational level obtained in institutions which are rather Westernised, and although they are drawn from the urbanised areas of Seoul, the capital of the second most industrialized country in Asia, which in many ways can be compared with the big cities in Europe or America, they have retained much of the traditional sex-role pattern in their self-concept.

It is found that among New Zealand young adults, on the other hand, many of the personal-competence oriented self concepts are not significantly different between males and females, although they rated themselves as basically sex-typed toward

their own sex with males being more Active, Rational, Successful and of higher Leadership, and females being Cleaner, more Religious, Helpful, Loving and Sociable. It was also found that there were fewer significant differences between the ratings of males and females among New Zealand young adults than among Korean young adults. This illustrates that there is a more liberated view of women's roles in New Zealand than in Korean society. Therefore, it can be concluded that Hypothesis 1 is in general supported by the present study.

I(ii) RELIGION-BASED DIFFERENCES IN ACTUAL SELF CONCEPT :
TEST OF HYPOTHESIS 2

Table 7-5 present the mean scores of the 30 items on the Present Self Concept Scale for Christian(XN) and non-believing (NB) young adults. Also presented in Table 7-5 are the results of the univariate F tests of which the detailed results for the Korean sample can be seen in Appendix 7-4 and those for the New Zealand sample in Appendix 8-4. Figure 7-2 shows these results graphically.

As seen in Table 7-5 and Figure 7-2, the findings can be summarized as follows.

Among Korean young adults:

1) The Christians perceived themselves as significantly more Patient ($P < .01$), Religious ($P < .001$), of higher Leadership ($P < .001$), more Self-controlled ($P < .05$), Popular ($P < .05$), Self-revealing ($P < .05$), Sociable ($P < .05$), Optimistic ($P < .062$), and Active ($P < .051$) than Non-believers. Other moral-social oriented traits such as Clean, Obedient, Loving, Polite, Helpful, Pleasant, Honest, Considerate and Responsible, most of which were classified as "moral values" in the Rokeach (1969)

(TABLE 7-5) MEANS OF ACTUAL SELF CONCEPTS FOR NON-BELIEVERS AND CHRISTIANS

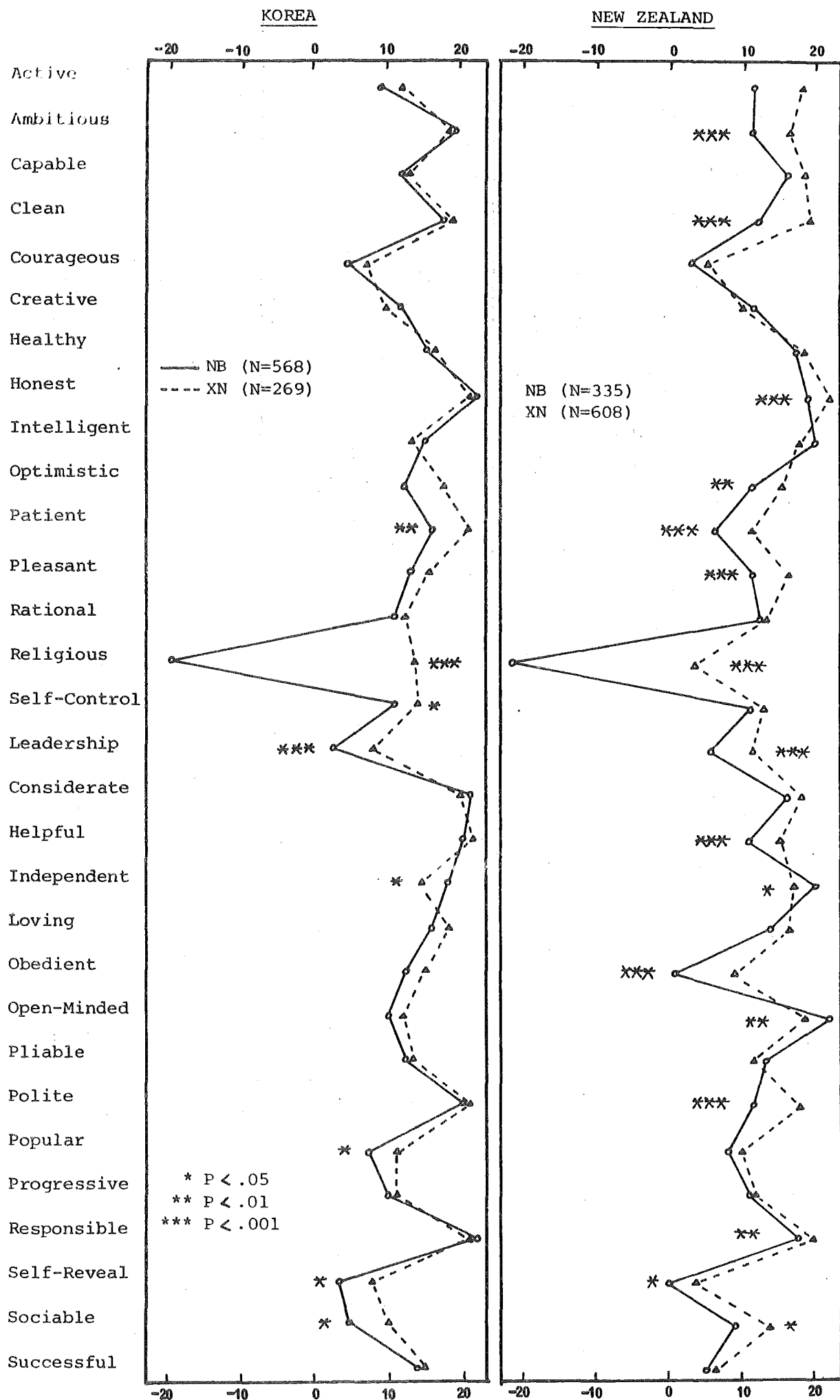
ITEMS	KOREA			N.Z.		
	NON-BELIEVER (N=568)	XIAN (N=269)	DIFF (NB-XN)	NON-BELIEVER (N=335)	XIAN (N=608)	DIFF (NB-XN)
Active	8.64	12.04	-3.40	16.46	17.69	-1.23
Ambitious	18.98	18.51	0.47	10.58	16.37	-5.79***
Capable	12.90	12.94	-0.04	15.99	17.69	-1.70
Clean	17.23	18.09	-0.86	11.68	18.48	-6.80***
Courageous	5.38	7.41	-2.03	2.82	4.81	-1.99
Creative	10.75	10.19	0.56	10.70	9.53	1.17
Healthy	15.25	16.45	-1.20	18.16	19.31	-1.15
Honest	23.31	22.58	0.73	19.37	23.43	-4.06***
Intelligent	15.34	14.16	1.18	19.59	17.84	1.75
Optimistic	11.70	16.51	-4.81	10.98	14.80	-3.82**
Patient	16.08	20.91	-4.83**	6.39	10.62	-4.23***
Pleasant	12.89	15.42	-2.53	11.09	16.15	-5.06***
Rational	10.94	11.83	-0.89	12.99	13.03	-0.04
Religious	-20.20	14.08	-34.28***	-22.59	3.97	-26.56***
Self-Controlled	11.14	14.28	-3.14*	10.95	11.81	-0.86
Leadership	2.60	8.05	-5.45***	6.18	10.88	-4.70***
Considerate	20.63	19.46	1.17	16.07	17.75	-1.68
Helpful	19.16	20.56	-1.40	10.92	15.18	-4.26***
Independent	18.06	14.62	3.44*	19.74	17.08	2.66*
Loving	15.89	17.58	-1.69	14.03	15.90	-1.87
Obedient	13.20	14.57	-1.37	0.79	8.60	-7.81***
Open-Minded	10.29	11.15	-0.86	21.54	18.65	2.89**
Pliable	13.14	13.43	-0.29	13.35	12.32	1.03
Polite	20.33	21.32	-0.99	12.18	18.11	-5.93***
Popular	7.30	11.04	-3.74*	7.55	10.26	-2.71
Progressive	9.65	10.20	-0.55	11.06	10.67	0.39
Responsible	23.20	22.73	0.47	16.64	20.26	-3.62**
Self-Revealing	4.09	8.12	-4.03*	-0.30	4.03	-4.33*
Sociable	5.40	10.06	-4.66*	8.96	13.95	-4.99*
Successful	14.15	14.20	-0.05	6.14	7.11	-0.97

* $P < .05$, ** $P < .01$, *** $P < .001$

study were not found to differentiate statistically between the two groups. But the differences on the first 6 traits were in favour of the Christians and the differences on the latter 3 traits were in favour of the Non-believers.

2) The items Progressive, Open-minded and Pliable, which can be considered as measures of the conservativeness of sub-

(FIGURE 7-2) ACTUAL SELF CONCEPTS OF CHRISTIAN AND NON-BELIEVING GROUPS



jects, did not show significant differences in mean rating scores between the two groups. The differences on these items were also negligible (the range of difference : 0.29 - 0.89).

3) Non-believers were found to perceive themselves as significantly more positive on the item Independent ($P < .05$). This is consonant with the finding of Dregner (1952). However, the results in this study indicate that all the other achievement-competence oriented traits such as Ambitious, Capable, Creative, Intelligent, Rational and Successful failed to produce significant differences between the groups (the range of difference : .04 - 1.18)

4) Similar to Rokeach's findings (1969, 1970), the items Courageous and Healthy did not differentiate significantly between the groups. However, they were found to be slightly in favour of the Christians.

From the above evidence, it can be concluded that Korean young adults with a Christian background in general had more positive moral-social oriented self concepts than those without a religious background. This finding is generally consistent with the findings of Brown and Lowe (1951), Sarbin and Rosenberg (1955) and Rokeach (1969, 1970) who reported the positive relationships between religiosity and moral, social, interpersonal oriented self concepts or values. The present results, however, showed that self concepts of the Christians were not significantly different from those of the Non-believers along dimensions of conservativeness and achievement-competence. These findings are contradictory to those of Argyle (1958), Brown (1962), Coates (1973) and many others (see Chapter 2), who reported positive correlation between religious belief and conservativeness or dogmatism. They are also contrary to those

of Rokeach (1969, 1970), Brown and Lowe (1951) and Symington (1935), who reported a negative correlation between religious belief and achievement-competence values or intelligence.

Thus it seems to indicate that there exists a different pattern of self concepts among Korean young adults, in relation to religious beliefs, from that of self concepts previously found in Western setting. Therefore Hypothesis 2 was partly supported by the Korean sample — among Korean young adults, the Christian and the Non-believers differed in their self concepts along a moral-social oriented dimension, but not along conservativeness and achievement-competence oriented dimensions.

Among New Zealand young adults:

1) The Christians showed significantly more positive self concepts than the Non-believers on most of moral-social oriented items: Clean ($P < .001$), Honest ($P < .001$), Optimistic ($P < .01$), Patient ($P < .001$), Pleasant ($P < .001$), Religious ($P < .001$), Helpful ($P < .001$), Obedient ($P < .001$), Polite ($P < .001$), Self-revealing ($P < .05$), Sociable ($P < .05$) and Responsible ($P < .01$). Other moral-social oriented items such as Self-controlled, Loving, Considerate and Popular failed to produce significant differences between the two groups, but differences were definitely in favour of the Christians (the range of difference: 0.9 - 2.71).

2) As in the Korean sample, most of achievement-competence oriented traits including Active, Capable, Intelligent, Creative, Rational and Successful did not show significant differences between the Christians and the Non-believers, but differences in all items except Intelligent and Creative were in favour of the Christians. Contrary to the findings of previous researchers (see Chapter 2) the Christians were found

to rate themselves significantly higher on Ambitious ($P < .001$) and Leadership ($P < .001$) than the Non-believers.

3) On the other hand, the Non-believers rated themselves significantly higher than the Christians on the items Independent ($P < .05$) and Open-minded ($P < .01$). The items Progressive and Pliable were also found to be in favour of the Non-believers, although the differences in mean rating scores between the groups were not statistically significant. This indicates that the Non-believers were more independent and less conservative than the Christians. This is a result one might have expected to find in European cultures.

4) The items Courageous and Healthy were not found to differentiate statistically between the groups. These findings are consistent with those with the Korean sample.

From the above results, it can be stated that in spite of the cultural differences, the pattern of difference in self concepts between the Christians and the Non-believers among New Zealand young adults is similar to the pattern found among Korean young adults — the Christians differed in their self concepts from the Non-believers along the moral-social oriented dimension, but not along the achievement-competence oriented dimension. These findings are partly consonant with those of Brown and Lowe (1951), Sarbin and Rosenberg (1955), and Rokeach (1969, 1970). Therefore, Hypothesis 2 was also partly supported by the New Zealand sample as by the Korean sample.

Similar to the findings of Argyle (1958), Brown (1962), DiRenzo (1967) and Coates (1973), our study on the young adults of New Zealand also showed that Christians perceived themselves as more conservative than the Non-believers. However, the

study on young adults in Korea proved otherwise.

Another difference in the pattern of self concepts between the two cultures is that the Christians among New Zealand young adults showed more distinctive differences from the Non-believers than the Korean Christians did from the Korean Non-believers, especially along the dimension of moral-social oriented self concepts. Furthermore, there were notably fewer items showing significant differences between the two groups among Korean young adults (2 items with $P < .001$, 1 item with $P < .01$ and 3 items with $P < .05$) than among New Zealand young adults (10 items with $P < .001$), 3 items with $P < .01$, and 3 items with $P < .05$). Therefore the results runs in the direction opposite to Hypothesis 2 in relation to the cross-cultural comparison.

In the present study, it was postulated that there would be more distinctive differences between the Christians and the Non-believers among Korean young adults than among New Zealand young adults, because Korea has more diverse religious backgrounds, while New Zealand is a predominantly Christian culture (see Chapters 2 and 4). This speculation was also based on some observations made with regard to New Zealand society. First, as reviewed in Chapter 4, the religious trends among university students are a continuing detachment from the church due to the greater individualism and personal autonomy among themselves in recent years. Thus some of the subjects who claimed to be Christians were not regular church-goers. Second, there is a swing towards secular values in the church today, as revealed in the nature and objectives of the sermons preached in church. These observations seem to support the postulation that the differences caused by the religion factor

on the self concepts of New Zealand young adults would be less significant than the differences caused by the same factor on their Korean counterparts.

The results of the present study, however, show that religion (Christianity) was not a differentiating factor in the self concepts of Korean young adults. This may be explained by the fact that Korean Christian young adults belong to a basically non-Christian society in which other cultural factors and other religious traditions have been an essential base of their lives. The teachings of Confucius, for example, are constantly reinforced through Moral Education at school (see Chapter 4) and are incorporated into their thoughts, behaviours and ideals. Thus both Christian and Non-believers cherish the same basic values and organize their lives on the same fundamental ideals. Hence it can be concluded that Table 7-5 reflects not only the effects of religion but also the effects of cultural differences.

In New Zealand, on the other hand, religion seems to be very significant in differentiating self concepts between Christian and non-believing young adults. Honest, Optimistic, Patient, Obedient, Helpful and Responsible — items on which the New Zealand Christian young adults scored higher — are clearly religious oriented traits which are in fact some of the cardinal virtues in Christianity. Nevertheless, with the Korean sample, only one of these traits (Patient) produced a significant difference in favour of the Christians.

Another interesting finding in the present study is that in both cultures, the Christians and the Non-believers did not differ from one another along the achievement-competence oriented dimension. This is at variance with the findings of many scholars (see Chapter 2) who reported negative correlation

between these traits and religious (Christian) beliefs.

In comparing the religion based differences in the self concepts of young adults of the two cultures, certain items deserve close attention.

1) As expected, the item Religious showed the sharpest contrast between the self concepts of Christians and Non-believers: difference was 34.28 ($P < .001$) in favour of Christians for the Korean sample and 26.56 ($P < .001$) for the New Zealand sample.

2) In both cultures, the item Independent showed significant difference between the groups favouring Non-believers. In the Korean sample, this was the only item showing statistical significance.

3) New Zealand Christians perceived themselves as significantly more Obedient than the Non-believers, but in the Korean sample, this item did not show significant difference between the groups. This again can be explained in the cultural perspective, as obedience is the proper behaviour expected of all Korean young adults who are but subordinates in the Confucius hierarchy of social structure.

In summary, the present results indicate that there were some differences in self concepts for the Christians and the Non-believers. In both cultures, as shown in Table 7-5 and Figure 7-2, the Christians generally rated themselves higher than Non-believers on moral-social oriented self concepts and conversely the Non-believers typically rated themselves more Independent than the Christians. The two groups, however, did not show significant differences on most of the achievement-competence oriented self concepts. One of the most interesting findings shown in Table 7-5 is that as opposed to Hypothesis 2,

the pattern of such distinction in self concepts between the groups was more clearly found among New Zealand young adults.

When the magnitude of differences as well as statistical significance was taken into account, most items emerged as self concepts in favour of the Christians (23 out of the 30 items for Korean, and 24 out of the 30 items for New Zealand Christians).

I(iii). EDUCATIONAL LEVEL (AGE) DIFFERENCES IN ACTUAL SELF
CONCEPT: TEST OF HYPOTHESIS 3

Table 7-6 shows the mean scores of the thirty items on the Present (Actual) Self Concept Scale for the three groups : High School (HS), Junior University (JU) and Senior University (SU) groups . Thus this section can also be considered as a cross-sectional study of self concepts of young adults in different age periods. Table 7-6 and Figure 7-3 also present the significance levels of the univariate F tests of which the detailed results for the Korean sample can be seen in Appendix 7-2 and those for the New Zealand sample in Appendix 8-2.

As shown in Table 7-6 and Figure 7-3, our findings can be summarized as follows.

Among Korean young adults:

1) The HS group in general showed more positiveness in self concepts than the university groups which displayed a similar degree of their self concepts, thus showing by inspection a general pattern of $HS > JU \approx SU$.

2) 12 of the 30 items were found to differentiate significantly between the three groups: Capable ($P < .01$), Courageous ($P < .01$), Intelligent ($P < .01$), Optimistic ($P < .001$), Pleasant ($P < .001$), Leadership ($P < .05$), Popular ($P < .001$), Progressive ($P < .05$), Sociable ($P < .01$), Successful ($P < .01$),

(TABLE 7-6) MEANS OF ACTUAL SELF CONCEPTS FOR THE THREE EDUCATIONAL LEVELS

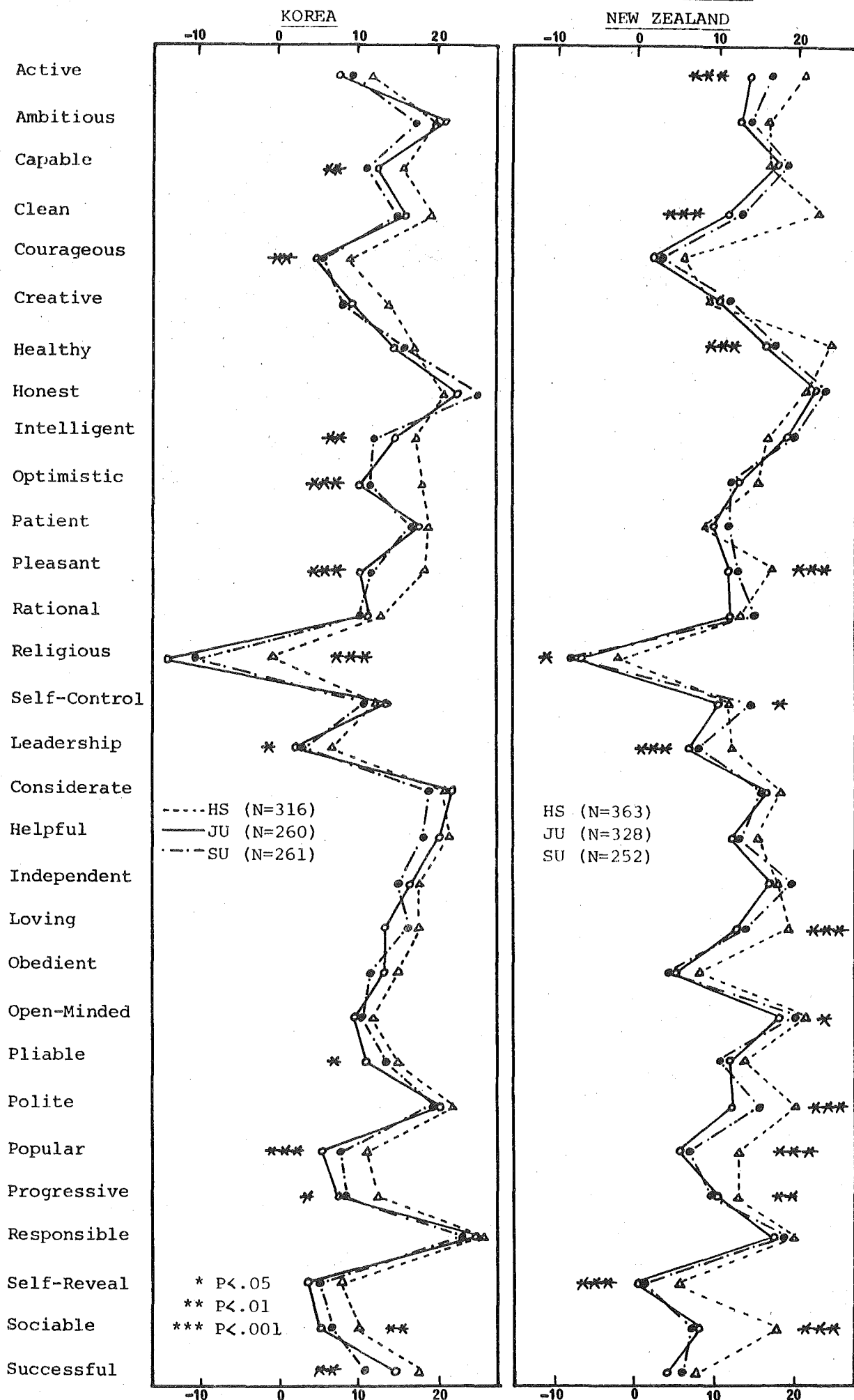
ITEM	KOREA				N.Z.			
	HS (N=316)	JU (N=260)	SU (N=261)	SIG. LEVEL	HS (N=363)	JU (N=328)	SU (N=252)	SIG. LEVEL
Active	12.42	7.64	8.51		21.34	13.95	15.67	***
Ambitious	20.09	19.78	16.64		15.47	13.05	14.29	
Capable	15.46	12.04	10.95	**	16.53	16.88	18.15	
Clean	18.81	16.40	16.07		22.69	11.26	12.77	***
Courageous	9.03	4.70	5.07	**	5.57	2.89	3.56	
Creative	14.33	9.06	8.18		9.44	9.59	11.15	
Healthy	17.14	14.53	15.62		23.50	16.03	16.03	***
Honest	21.25	23.44	24.46		21.31	21.94	23.04	
Intelligent	16.98	14.53	12.91	**	17.24	19.09	19.41	
Optimistic	18.14	10.10	10.62	***	15.07	12.66	12.11	
Patient	18.45	17.77	17.58		8.54	8.50	10.88	
Pleasant	17.87	9.87	11.09	***	17.34	12.05	13.06	***
Rational	13.07	10.81	9.5		13.14	12.35	13.69	
Religious	-0.54	-14.35	-10.88	***	-2.58	-6.91	-7.74	
Self-Controlled	11.59	13.01	11.38		11.13	9.76	14.33	*
Leadership	6.79	2.89	3.10	*	12.09	7.09	7.85	***
Considerate	20.73	21.08	19.01		17.93	16.69	16.64	
Helpful	20.85	20.13	18.43		14.84	12.68	13.27	
Independent	18.11	16.90	15.61		18.20	17.45	18.51	
Loving	17.72	14.17	16.14		18.49	12.94	13.54	***
Obedient	14.96	13.77	12.66		7.52	4.80	4.74	
Open-Minded	12.34	10.05	10.24		21.23	17.86	19.79	*
Pliable	14.81	10.86	13.65	*	14.35	12.22	10.88	
Polite	21.90	19.98	19.55		19.71	13.05	14.52	***
Popular	11.26	5.48	7.58	***	13.02	6.99	6.94	***
Progressive	12.48	7.92	8.32	*	12.81	9.59	9.51	**
Responsible	23.49	23.47	22.56		20.36	17.45	18.98	
Self-Revealing	8.04	3.79	4.97		5.91	0.51	0.61	***
Sociable	10.15	4.63	5.64	**	18.39	8.33	8.23	***
Successful	17.13	14.85	10.28	**	8.12	5.36	6.63	

* $P < .05$, ** $P < .01$, *** $P < .001$

Pliable ($P < .05$) and Religious ($P < .001$). All of them showed the pattern of $HS > JU \neq SU$ with the exception of Successful ($HS > JU > SU$), Pliable ($HS \neq SU > JU$) and Religious ($HS > SU > JU$).

3) The remaining 18 items did not produce statistical significance between the three groups, although most of them followed the prevalent pattern of $HS > JU \neq SU$. Five of these (Considerate,

(FIGURE 7-3) ACTUAL SELF CONCEPTS OF HS, JU AND SU GROUPS



Independent, Self-controlled, Responsible, Obedient) even showed the pattern of $HS \approx JU \approx SU$, thus indicating that self concept is relatively stable during young adulthood.

Among New Zealand young adults:

1) As in the case of the Korean sample, but to a less marked degree the HS group tended to score higher than the other two groups which showed a similar degree of positiveness in their self concepts thus showing a general pattern of $HS > JU \approx SU$.

2) Significant differences between the three groups (HS, JU and SU) were found in 14 out of the 30 items: Active ($P < .001$), Clean ($P < .001$), Healthy ($P < .001$), Pleasant ($P < .001$), Religious ($P < .05$), Self-controlled ($P < .05$), Leadership ($P < .001$), Loving ($P < .001$), Open-minded ($P < .05$), Polite ($P < .001$), Popular ($P < .001$), Progressive ($P < .01$), Self-revealing ($P < .001$) and Sociable ($P < .001$). All these items showed the pattern of $HS > JU \approx SU$ with the exception of Self-controlled which revealed the pattern of $SU > HS \approx JU$.

3) The remaining sixteen items did not yield significant differences between the three groups, although most of them showed the pattern of $HS > JU \approx SU$. Moreover, five of these items (Rational, Independent, Capable, Creative and Honest) even revealed the pattern of $HS \approx JU \approx SU$. This suggests a trend similar to the one found in the Korean sample, i.e. self concept is relatively stable during young adulthood.

From the above evidence, it is observable that first of all, both samples revealed a very similar pattern of educational level (age) differences in self concept. Hence the postulation with regard to the cross-cultural comparison in this aspect of self concept (Hypothesis 3) is not supported. Secondly, it

was also postulated that a general increase in positiveness with the increase of education (age) could be detected in the self concept of young adults in both cultures. However, our findings indicate a prevalent pattern of $HS > JU \approx SU$, which means that high school students in general showed more positiveness in their self concepts than university students, and that the two university groups (JU and SU) did not differentiate according to their educational levels. It is also important to point out that despite the apparent differences between the high school group and the university groups, in fact more than half of the 30 items produced no statistically significant differences. Therefore, it may be concluded that the self concepts of young adults in both Korea and New Zealand seemed to have stabilized by the time they attended senior high school, and were maintained steadily during the university period.

Hypothesis 3, nevertheless, was postulated on the assumption that education would bring about changes in the personalities and self concepts of the subjects. This is a general view held by most educators, whether they regard education as an exclusively intellectual activity or otherwise. Hence it was assumed that the increase in education would be accompanied by an increase of positiveness in self concepts. Moreover, because of the general climate of keen competitiveness in the educational system and the society of Korea, which is a society in transition (see Chapter 4 and section IV of the present Chapter), it was also postulated that such a pattern would be more distinctive in Korea.

Apparently these predictions are not confirmed by our findings which are also in conflict with those reported in the longitudinal researches (e.g., Engel, 1959; Taylor, 1955;

Carlson, 1965). However, the disagreement between the present study and the previous reports may be the result of the differences in methodology.

The pattern of decrease of positiveness in self concepts with the increase of education, nevertheless, is observable in the study on the self concepts of some 5th, 8th and 11th graders by Katz and Zigler (1967). Such a phenomenon, moreover, may be reviewed in the light of Bloom's exposition on aging process (Bloom, 1961) and Bohan's re-evaluation of the self concept in this age period (Bohan, 1973). During late adolescence (university period), the individuals are confronted by personal problems in a number of areas for which they seek solutions. These include the need to make a satisfactory adjustment to a less extensively regulated environment than the more regulated one as in high schools; increased responsibility and a need for self-discipline; intellectual competition with other students; anxiety over interpersonal social and sexual problems; planning for the future career and so forth. These adjustment problems lead to doubts concerning the individual's self-esteem which he has held so far and result in a more realistic re-evaluation of the self in relation to the ideals — hence self evaluation at this period is generally lower.

The similarity in self concepts between the JU and SU groups as revealed in our present study is also at variance with most of the findings in the literature (Newcomb, 1943; Sanford, 1956a, 1956b; Garrison, 1961; Lehmann, 1963; Feldman and Newcomb, 1969; Little, 1970; Plant, 1965; Feather, 1973). However it agrees with that of Katz, Katz and Olphert (1965), who in a longitudinal study conducted at the University of New

England, Australia, found little evidence of change in attitudes and cognitive styles between students in their first year and these same students in their third year. It may therefore be that we are touching on some characteristics of Australian phenomena, though this suggestion is frankly speculative. Our finding is also in accordance with the results of some other investigations reviewed earlier by Jacob (1957, quoted in Feather, 1973).

Although the pattern of educational level (age) differences among university students may emerge in a distinctive form, it baffles interpretation. However, attempts have been made by Feldman and Newcomb (1969) to explain such a phenomenon by the notion that the common characteristics shared by the students, which have in fact contributed to their initial decision to embark on a university education, are accentuated by their university life. To Jacob (1957) the main effect of university experience is the production of homogeneous beliefs, attitudes and values among university students. While Jacob's argument may be too sweeping, it is undeniable that the environment of the campus (including youth cultures, the pursuit of knowledge, the promotion of prevailing attitudes and values among the students) has a decisive effect on the self concepts of these young adults. This is true of the Korean university students who in fact belong to a elite group in society. It is also true of the New Zealand subjects who, according to Vellekoop (1968), represent a small portion of the young population and appear to have strong and similar achievement values.

A cross-cultural comparison of the items showing statistical significance, on the other hand, discloses some interesting points. In Korea, for instance, HS students scored

higher than university students on a number of social (Pliable, Sociable, Popular, Pleasant, Optimistic) and Competence (Capable, Courageous, Intelligent, Successful, Progressive, Leadership) traits as well as on Religious. New Zealand HS students, however, scored higher than their university counterparts on several moral-social self concept traits (Clean, Self-controlled, Loving, Polite, Open-minded, Self-revealing, Sociable, Popular, Pleasant, Active) as well as on the items Religious, Healthy, Progressive and Leadership.

The decrease of positiveness in social and competence self concepts in the case of Korean university students may be explained, perhaps, as a relaxation from the pressure of constant competition in achieving their objective — a place in the university. Because of the relatively easy access to higher education in New Zealand, this phenomenon is not prominent. On the other hand, the decrease of positiveness in moral-social self concepts among the New Zealand university students may be explained as a result of the effect of the current university culture, which tends to challenge (though not very strongly by comparison with some European universities) most social and moral conventions of the establishment. This tendency, however, is not a distinctive feature of the university culture in Korea.

In comparing the educational differences in the self concepts of young adults of the two cultures, certain items deserve close attention, although there exist interpretive difficulties, as is common in most studies concerned with the impact of education on students (Feather, 1973).

1) The item Religious for the New Zealand sample showed a pattern of HS > JU > SU — a result commonly found by most

researchers (Feldman and Newcomb, 1969; Lehmann, 1963; Webster et al., 1962) who reported a declining commitment to religion by young people in their university period. The Korean sample also showed a similar decline, though their SU group scored higher than the JU group, showing a pattern of HS > SU > JU. Perhaps, this fluctuation can be related directly to the degree of their anxiety with regard to their studies and career.

2) A general decline in positiveness can be traced along the dimension of Successful in both samples: the New Zealand sample displayed a pattern of HS > JU \approx SU, though showing no statistical significance, but the Korean sample revealed a significant decrease of positiveness with the increase of education — HS > JU > SU.

3) The item Pliable for the New Zealand sample showed the common pattern of HS > JU \approx SU with no statistical significance, but the Korean sample followed a different pattern — HS \approx SU > JU.

4) New Zealand SU students perceived themselves as significantly more Self-controlled than JU students. This is consistent with that reported by Plant and Telford (1966). The two Korean university groups, however, did not show significant difference on this item.

Nevertheless, despite the differences described above, it should be borne in mind that in both samples more than half of the items did not differentiate significantly between the three groups, thus providing a strong evidence for stability in self concepts during young adulthood regardless of the differences in educational (age) levels. This seems to indicate that the stability of some areas of self concept is achieved before or at least by senior high school age, and maintained steadily during the university period. These results are

supported by the earlier findings and the theoretical notion that self concept becomes to resist change once self definition and self differentiation have taken place (Purkey, 1970; Engel, 1959; Taylor, 1955; Lecky, 1945).

In summary, Hypothesis 3 is not supported by the present findings which suggested that the pattern of educational level differences in self concepts (despite a few minor differences) is very similar among both Korean and New Zealand young adults: 1) Senior high school students in general showed more positiveness in self concepts than the university students, whereas junior and senior university students appeared to have a very similar degree of positiveness in their self concepts; 2) Self concept is already relatively stable among young adults and is highly consistent especially during the university period.

II. MANOVA ANALYSES OF IDEAL SELF CONCEPTS.

The mean scores and standard deviations (SDs) for eight Korean groups (2E x 2X x 2R) and for eight New Zealand groups on the 30 variables of the Ideal Self Concept Scale are shown in Appendices 9-1 and 10-1 respectively. The eight groups in each culture are:

- 1) Junior university male Non-believers (JU-M-NB),
- 2) Junior university male Christians (JU-M-XN),
- 3) Junior university female Non-believers (JU-F-NB),
- 4) Junior university female Christians (JU-F-XN),
- 5) Senior university male Non-believers (SU-M-NB),
- 6) Senior university male Christians (SU-M-XN),
- 7) Senior university female Non-believers (SU-F-NB) and
- 8) Senior university female Christians (SU-F-XN).

In the MANOVA analyses for ideal self concepts, the high school groups in both cultures were not included, as that scale

was not available for all the subjects concerned in the early part of the study.

Table 7-7 shows the range of SDs for the groups of both cultures. From the table, it is found that SDs for the Korean groups in general are similar to those for the New Zealand groups, but the range of SDs for the Korean groups are slightly larger on 23 out of the 30 items than for the New Zealand groups. This indicates that the scores of the Korean groups on the 23 items showed more spread than those of the New Zealand groups on the same items.

(TABLE 7-7) RANGE OF SDs ON THE IDEAL SELF CONCEPT SCALE FOR THE 8 GROUPS
(2E x 2X x 2R)

ITEMS	RANGE OF SDs OF THE 8 KOREAN GROUPS	RANGE OF SDs OF THE 8 N.Z. GROUPS
Active	14.94 - 21.75	13.78 - 16.83
Ambitious	15.17 - 18.88	14.31 - 20.13
Capable	13.97 - 19.29	13.41 - 16.61
Clean	12.91 - 23.75	16.11 - 19.43
Courageous	16.27 - 20.92	12.47 - 23.96
Creative	16.12 - 20.67	14.63 - 18.66
Healthy	17.24 - 21.89	12.62 - 17.76
Honest	14.96 - 23.00	12.56 - 18.75
Intelligent	13.54 - 20.50	15.08 - 19.28
Optimistic	15.94 - 22.80	15.35 - 19.32
Patient	14.60 - 19.65	12.76 - 15.43
Pleasant	13.33 - 20.03	14.13 - 18.27
Rational	14.28 - 19.46	15.40 - 17.99
Religious	16.94 - 24.78	19.04 - 26.45
Self-Controlled	14.03 - 19.10	15.41 - 21.22
Leadership	16.80 - 20.86	10.00 - 17.79
Considerate	15.09 - 17.14	13.14 - 14.88
Helpful	13.76 - 19.22	13.59 - 16.70
Independent	14.88 - 19.16	15.49 - 19.34
Loving	13.43 - 21.74	12.94 - 16.96
Obedient	16.75 - 25.62	14.28 - 18.95
Open-Minded	15.64 - 22.93	11.05 - 16.33
Pliable	14.31 - 20.01	15.28 - 19.57
Polite	13.12 - 20.41	14.32 - 17.19
Popular	12.94 - 22.10	15.40 - 22.17
Progressive	14.97 - 23.02	12.56 - 21.24
Responsible	13.88 - 19.22	12.72 - 16.58
Self-Revealing	17.11 - 25.23	15.89 - 19.43
Sociable	15.76 - 22.45	13.31 - 17.97
Successful	16.50 - 22.77	16.01 - 24.18

To test the significance of various combinations of groupings, a MANOVA was performed for each culture and the results are summarized in Table 7-8 and Table 7-9.

(TABLE 7-8) SUMMARY OF THE RESULTS FROM THE MANOVA FOR THE IDEAL SELF CONCEPTS
OF THE KOREAN GROUPS

FACTOR	NO. OF ROOTS	RANGE OF F VALUES	NO. OF SIGNIFICANT ROOTS (P LEVEL)	RANGE OF CANONICAL CORRELATION (R)	REFERENCE FOR UNIVARIATE F TESTS
E*	1	1.646	1 (.02)	.304	Appendix 9-2
X**	1	2.841	1 (.001)	.387	" 9-3
R***	1	4.210	1 (.001)	.455	" 9-4
EX	1	.679	Nil	.201	" 9-5
ER	1	1.104	Nil	.253	" 9-6
XR	1	.848	Nil	.223	" 9-7
EXR	1	1.123	Nil	.225	" 9-8

*Educational Level, ** Sex, *** Religion

(TABLE 7-9) SUMMARY OF THE RESULTS FROM THE MANOVA FOR THE IDEAL SELF CONCEPTS
OF THE N.Z. GROUPS

FACTOR	NO. OF ROOTS	RANGE OF F VALUES	NO. OF SIGNIFICANT ROOTS (P LEVEL)	RANGE OF CANONICAL CORRELATION (R)	REFERENCE FOR UNIVARIATE F TESTS
E	1	1.749	1 (.009)	.297	Appendix 10-2
X	1	3.822	1 (.001)	.418	" 10-3
R	1	6.731	1 (.001)	.521	" 10-4
EX	1	.947	Nil	.223	" 10-5
ER	1	.718	Nil	.195	" 10-6
XR	1	1.080	Nil	.237	" 10-7
EXR	1	1.016	Nil	.231	" 10-8

From Tables 7-8 and 7-9, it is clear that in both cultures, there were significant effects of educational level (Factor E), sex (Factor X) and religious background (Factor R) on the ideal

self concepts of young adults. Hence when the 8 groups were regrouped according to these three main factors, definite differences were found between the new subgroups. They differed significantly from each other along the one dimension analyzed as seen in Tables 7-8 and 7-9. Wilks Lambda P values for Factors X and R in both cultures were less than .001, while Factor E in Korean groups was less than .02, and Factor E in New Zealand groups was less than .009.

It is also found from the above Tables, that there were no significant interaction effects of any combination of factors for both Korean and New Zealand groups. The detailed MANOVA analyses and the univariate F tests for all 30 criteria variables are shown in Appendices as indicated in the last column of Tables 7-8 and 7-9.

To examine the effects of the three main factors more closely, mean scores of the 30 variables for the 8 groups in each of the two cultures (Appendices 9-1 and 10-1) were pooled together according to sex, religion and educational level. The results of the univariate F tests on these data will be discussed in detail below. This relates to the testing of Hypothesis 4, 5 and 6.

II(i). SEX DIFFERENCES IN IDEAL SELF CONCEPTS : TEST OF HYPOTHESES 4

Table 7-10 presents the mean of rating scores on the 30 variables of the Ideal Self Concept Scale for male and female subjects in both cultures and Figure 7-4 shows this graphically.

The findings as represented in Table 7-10 and Figure 7-4, can be summarized as follows.

Among Korean young adults (university students):

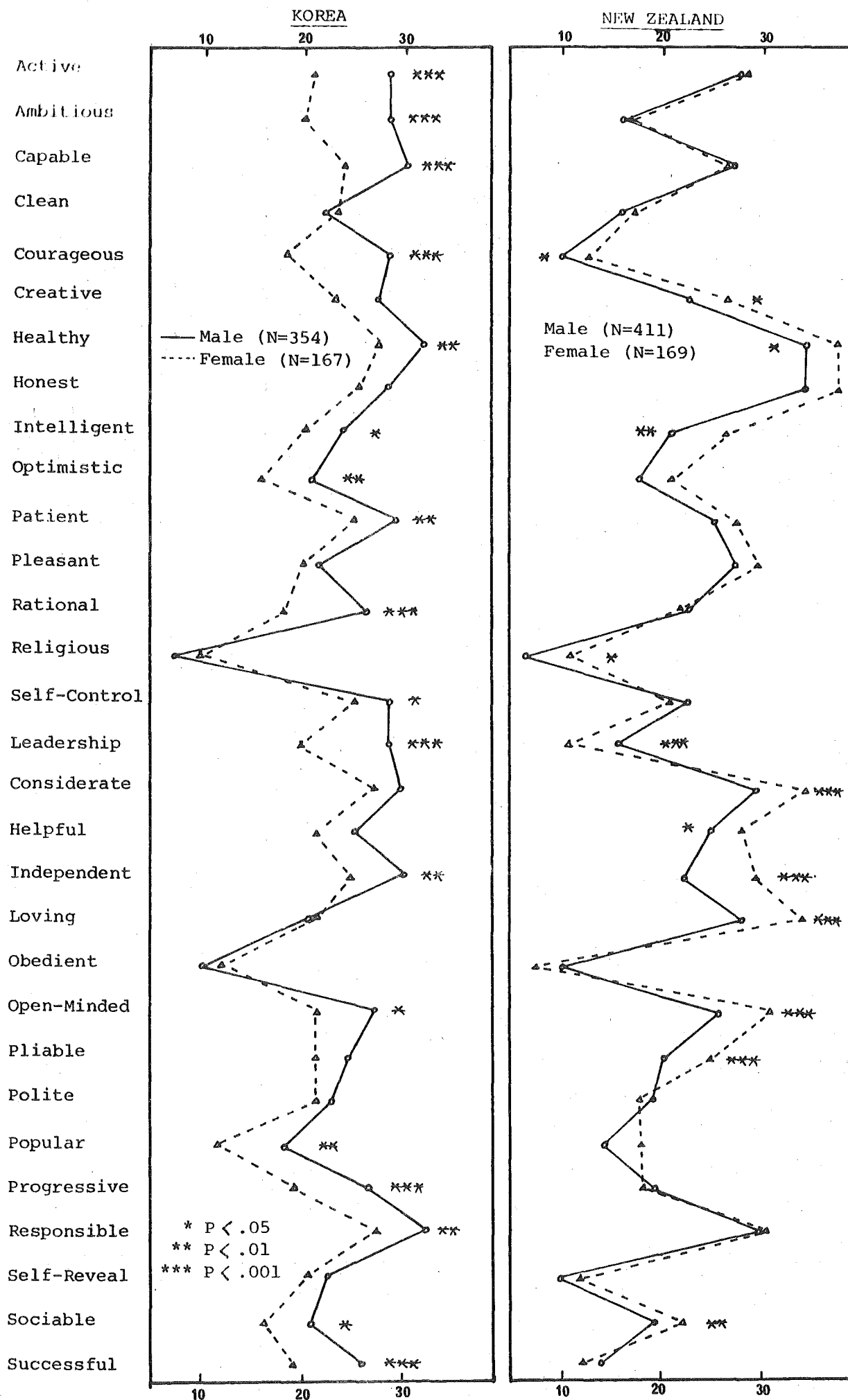
(TABLE 7-10) MEANS OF IDEAL SELF CONCEPTS FOR MALES AND FEMALES

ITEMS	KOREA			N.Z.		
	MALE (N=354)	FEMALE (N=167)	DIFF (M-F)	MALE (N=411)	FEMALE (N=169)	DIFF (M-F)
Active	27.70	20.54	7.16***	27.03	27.33	-0.30
Ambitious	28.31	20.03	8.28***	16.22	16.88	-0.66
Capable	30.07	24.34	5.73***	26.93	26.82	0.11
Clean	21.89	22.99	-1.10	15.76	17.00	-1.24
Courageous	28.28	18.29	9.99***	9.65	12.92	-3.27*
Creative	26.74	23.98	2.76	23.27	26.23	-2.96*
Healthy	32.18	27.31	4.87**	33.85	37.29	-3.44*
Honest	28.11	25.27	2.84	34.08	26.53	-2.45
Intelligent	23.74	19.61	4.13*	21.25	25.67	-4.42**
Optimistic	20.62	15.51	5.11**	17.59	20.91	-3.32
Patient	29.32	24.52	4.80**	25.21	26.54	-1.33
Pleasant	21.55	20.06	1.49	26.61	29.07	-2.46
Rational	25.79	18.44	7.35***	23.28	21.97	1.31
Religious	7.08	10.15	-3.07	5.47	10.46	-4.99*
Self-Controlled	28.36	24.76	3.60*	23.16	21.37	1.79
Leadership	27.69	20.03	7.66***	15.96	10.80	5.16***
Considerate	29.14	26.98	2.16	29.24	33.52	-4.28***
Helpful	25.14	22.10	3.04	25.11	27.95	-2.84*
Independent	29.86	25.42	4.44**	21.80	28.92	-7.12***
Loving	21.03	20.81	0.22	28.39	33.63	-5.24***
Obedient	9.52	12.40	-2.88	9.48	7.10	2.38
Open-Minded	26.81	22.37	4.44*	25.70	30.81	-5.11***
Pliable	25.27	22.31	2.96	20.11	25.00	-4.89***
Polite	23.31	21.95	1.36	18.71	18.18	0.53
Popular	17.66	12.49	5.17**	14.28	17.01	-2.73
Progressive	25.71	18.83	6.88***	18.90	17.89	1.01
Responsible	32.19	27.19	5.00**	29.51	30.31	-0.80
Self-Revealing	23.38	20.57	2.81	9.63	12.80	-3.17*
Sociable	21.34	17.13	4.21*	19.23	23.22	-3.99**
Successful	26.16	18.62	7.54***	13.45	13.07	0.38

1) Males rated all items, except three typical feminine traits (Clean, Religious and Obedient), as more desirable for their ideal self concepts than females did, thus indicating that there exists male-dominated sex-role stereotypes in ideal self concepts. This finding is consistent with that on the Present Self Concept Scale with Korean young adults.

2) Males rated the following achievement-competence oriented traits as significantly more desirable for their ideal

(FIGURE 7-4) IDEAL SELF CONCEPTS OF MALE AND FEMALE GROUPS



self concepts than females did: Active ($P < .001$), Ambitious ($P < .001$), Capable ($P < .001$), Courageous ($P < .001$), Rational ($P < .001$), Independent ($P < .01$), Open-Minded ($P < .05$), Progressive ($P < .001$), Successful ($P < .001$), of Leadership ($P < .001$) and Intelligent ($P < .05$). The items Pliable and Creative did not show significant difference between the sexes, but the differences were in favour of males. These findings indicate that ideal self concepts of males are clearly different from those of females along the competence-achievement oriented dimension.

3) Males also rated the following moral-social oriented items as significantly more desirable for their ideal self concepts than females did: Patient ($P < .01$), Self-Controlled ($P < .05$), Responsible ($P < .01$), Popular ($P < .01$), Optimistic ($P < .01$) and Sociable ($P < .05$). The items Honest, Pleasant, Considerate, Helpful, Loving, Polite and Self-Revealing, however, did not produce significant difference between the sexes, but the differences were in favour of males. All these findings indicate that ideal self concepts of Korean males differ considerably from that of Korean females along the moral-social oriented dimension.

4) None of the 30 items was found to be significantly favouring the females, although the items Clean, Religious and Obedient received higher scores from the females.

5) The item Healthy also produced a significant difference between the sexes favouring the males. On the Present Self Concept Scale, however, this item was in favour of the females without statistical significance.

From the above results, we can conclude that the male-dominated sex-role stereotypes found on the Present Self Concept

Scale, were also incorporated into the ideal self concepts of Korean young adults. This is consistent with the findings of previous researchers (e.g., Fernberger, 1948; McKee and Sherriffs, 1959; Broverman et al., 1972) who reported that the existing sex-role stereotypes are desirable as attributes of the ideal self. Therefore, Hypothesis 4 with regard to the ideal self concepts of Korean young adults is confirmed.

In contrast to the findings of Elman et al. (1970) and many others (see Chapter 2), however, the Korean styled male-dominated sex-role pattern was more strongly reflected in the ideal self concept than in the present (actual) self concept. On the Present Self Concept Scale there were 7 items (Clean, Healthy, Optimistic, Patient, Pleasant, Religious and Polite - see Table 7-4) favouring the females with two items (Clean and Pleasant) showing statistical significance, whereas on the Ideal Self Concept Scale only three items (Clean, Religious and Obedient) were found to be in favour of the females but they did not show statistical significance. Although the ideal self concepts between the sexes differ along the sex-role dimension, we had expected the females to show a much greater interest in male-valued traits as a reaction to the unequal treatment they receive and the inferior status they hold in Korean society. However to a large extent, Korean women seem to have simply accepted their role for which they have been trained. Thus it can be concluded that although the roles of men and women have undergone certain changes in the modern Korean society, young adults still feel that the traditional male-dominated sex role is still the most desirable in their ideal self concepts.

Among New Zealand young adults:

1) Females rated 22 out of the 30 items as more desirable for their ideal self concepts than males did, thus indicating that the ideal self concepts of New Zealand young adults reflect the strong desire of the females for a more liberated and emancipated role in society, a desire which has received repeated publicity in the news media. This finding is in accordance with the results shown on the Present Self Concept Scale for New Zealand young adults.

2) The following achievement-competence oriented items were found to be significantly more desirable for female ideal self concepts than for male ideal self concepts: Creative ($P < .05$), Intelligent ($P < .01$), Open-Minded ($P < .001$), Pliable ($P < .001$), Independent ($P < .001$) and Courageous ($P < .05$). Two other achievement-competence oriented traits (Active and Ambitious) were also in favour of the females, although they did not show significant differences between the sexes. It is also observed that all these items were those on the Present Self Concept Scale (see Table 7-4) which did not show significant difference between the sexes, or showed significant difference in favour of the males. This seem to reveal a very strong tendency on the part of New Zealand females toward a more liberated role in society and a strong desire to be equal of their male counterparts even in the areas of achievement and competence.

3) The following moral-social oriented traits were found to be significantly more desirable for female ideal self concepts than for male ideal self concepts: Considerate ($P < .001$), Helpful ($P < .05$), Religious ($P < .05$), Loving ($P < .001$), Self-revealing ($P < .05$) and Sociable ($P < .01$). Most of the other moral-social oriented traits such as Honest, Clean, Patient,

Pleasant, Optimistic, Responsible, Popular were also found to be more desirable for female ideal self concepts, but they failed to produce significant differences between the sexes (the range of differences: .80 ~ 3.32).

4) Leadership was the only item which produced statistical significance ($P < .001$) favouring the males as a desirable attribute for the ideal self concept. Capable, Rational, Progressive and Successful which can be classified as achievement-competence oriented ideal self attributes were also in favour of the males, but the magnitude of differences on these items between the sexes was small. (.11, 1.31, 1.01 and .38 respectively).

5) Self-controlled, Obedient and Polite, which can be classified as moral-social oriented traits, did not produce statistical differences, but were in favour of the males.

6) The item Healthy was found to be significantly ($P < .05$) more desirable as an ideal self attribute for females than for males. This item was in favour of the males on the Present Self Concept Scale with statistical significance ($P < .001$).

The above results indicate that New Zealand males showed a slightly masculine sex typing in their ideal self concepts, whereas females desired an androgynous ideal self. These findings are generally consistent with those of Deutsch and Gilbert (1976) who reported more sex-typing in male ideal self concepts and less sex-typing or a more androgynous tendency in female ideal self concepts, and those of Elman et al. (1970) who reported less sex-role stereotyping in ideal self than in actual self concepts. This suggests that New Zealand females (university students) want to be more androgynous although they

have already reached a level similar to that of their male counterparts in their actual self concepts, especially in some of the male-valued traits such as Intelligent, Capable, Ambitious, Creative, Progressive and Open-minded (see Table 7-4). In other words, a strong desire for a more liberal and egalitarian role/position in society is reflected in the ideal self concepts of New Zealand females. This phenomenon may be explained as the response of New Zealand females to the expectations imposed by society on the modern women who, because of her more liberated views and greater involvement in the world of males, has to show her ability in adjusting to a basically male-oriented social context by acquiring male-valued traits. Recent evidence suggested that masculinity is indeed the norm for cultural socialization (Block, 1973). Komarovsky (1950) even argued that the model of masculinity is increasingly difficult to attain in modern society because of strong pressure to bring about a change in the modern sex-role pattern.

However, our data showed that New Zealand females desire to retain most of female valued traits in their ideal self concepts. This seems to explain that the ideal image of women is still being considered as social-other oriented, and that women's behaviours especially within the domestic sphere conform to this expectation. Males, on the other hand, did not aspire to be androgynous in their ideal self concepts, although their ideal self concepts appeared to be less masculine than their actual self concepts. This may indicate that there is no need for the males to adopt feminine traits to adjust to an already masculine society. These results, therefore, in general support Hypothesis 4 with regard to the sex-role stereotyped ideal self concepts of New Zealand young adults, and are consonant with

previous studies (McKee and Sherriffs, 1959 and many others - see Chapter 2) which suggest that female ideal self concepts are less sex-typed than the male ones.

The overall comparison of sex differences in the ideal self concept between the two cultures is also consistent with Hypothesis 4: the sex-role stereotyped pattern of sex differences in the ideal self concept would be more distinctive among Korean young adults than among New Zealand young adults.

As shown in Table 7-10 and Figure 7-4, the most notable point is that among Korean young adults, males rated 27 out of the 30 items (with 18 items showing significant sex difference) as more desirable for their ideal self concepts, whereas among New Zealand young adults, females rated 22 out of the 30 items (with 13 items showing significant sex differences) as more desirable for their ideal self concepts. As discussed in the section on the sex differences in actual self concept, these findings well illustrate the two different cultural backgrounds — traditionally male dominated Korean society and the more egalitarian New Zealand society (see Chapter 4). From these findings we can conclude that although being educated in a Westernized university, Korean females still seem to be content with their traditional role, whereas New Zealand females seem to be willing or are prepared to move towards a more flexible and liberated role/position in society. However, as Penman (1975) argued, whether this preparedness foreshadows more positive action in the feminist movement or simply indicates a willingness to accept changes brought about by others has yet to be shown.

Another point of interest is the comparison of items which

did not produce significant differences between the sexes in each culture. Among Korean young adults they are mostly moral-social oriented traits such as Clean, Honest, Pleasant Religious, Considerate, Helpful, Loving, Obedient, Polite, Pliable, Self-revealing, thus indicating that ideal self concepts of Korean young adults do not significantly differ between the sexes along the moral-social oriented dimension, but significantly differ mainly along the achievement-competence oriented dimension.

The items which failed to produce a significant difference between New Zealand males and females are from both male and female valued traits: most of the achievement-competence oriented traits such as Active, Ambitious, Capable, Rational, Progressive, Successful and some of the moral-social oriented traits such as Clean, Honest, Optimistic, Patient, Self-controlled, Pleasant, Obedient, Polite, Popular and Responsible. Compared with the findings among Korean young adults, this indicates 1) that the patterns of ideal self concept of the New Zealand males and females are characterized as much more androgynous and 2) that the two patterns differ more on the social-other oriented dimension (Considerate, Helpful, Sociable, Loving, Pliable, Self-revealing, Open-minded) than on the achievement-competence oriented dimension.

In summary, the present study has demonstrated clear sex differences in ideal self concepts of young adults in both cultures. Korean males and females differed in their ideal self concepts along the Korean-styled male-dominated sex role pattern favouring males in most of the attributes covered in the present study. However, New Zealand young adults in general, who though basically differed in their ideal self concepts

along the sex role stereotypic dimension (social-other orientation for females and achievement-competence orientation for males), showed a more androgynous tendency in their ideal self concept while their females expressed a strong desire towards more positiveness in the achievement-competence oriented traits.

II(ii). RELIGION-BASED DIFFERENCES IN IDEAL SELF CONCEPT : TEST OF HYPOTHESIS 5

The mean scores of the 30 items on the Ideal Self Concept Scale for the Christians and the Non-believers are shown in Table 7-11. Also presented in the same Table are the results of the univariate F tests of which the detailed results for the Korean sample can be found in Appendix 9-4 and those for the New Zealand sample in Appendix 10-4. The graphical presentation of these results is shown in Figure 7-5.

The findings represented in Table 7-11 and Figure 7-5 can be summarized as follows.

Among Korean young adults (university students):

1) The Non-believers did not significantly differ from the Christians in their ideal self concepts on any of the items except on Religious (with a very large difference of 21.07 in favour of the Christians). However, the mean scores on 24 of the 30 items were in favour of the Non-believers.

2) The Non-believers and Christians did not significantly differ from each other in their moral-social ideal self concepts in any distinctive pattern. Some moral-social traits such as Clean, Honest, Helpful and Obedient were in favour of the Christians, yet had no statistical significance (the range of difference was only .06 — 1.89), but the item Self-controlled was found to favour the Christians at P value less than .10

(TABLE 7-11) MEANS OF IDEAL SELF CONCEPTS FOR NON-BELIEVERS AND CHRISTIANS

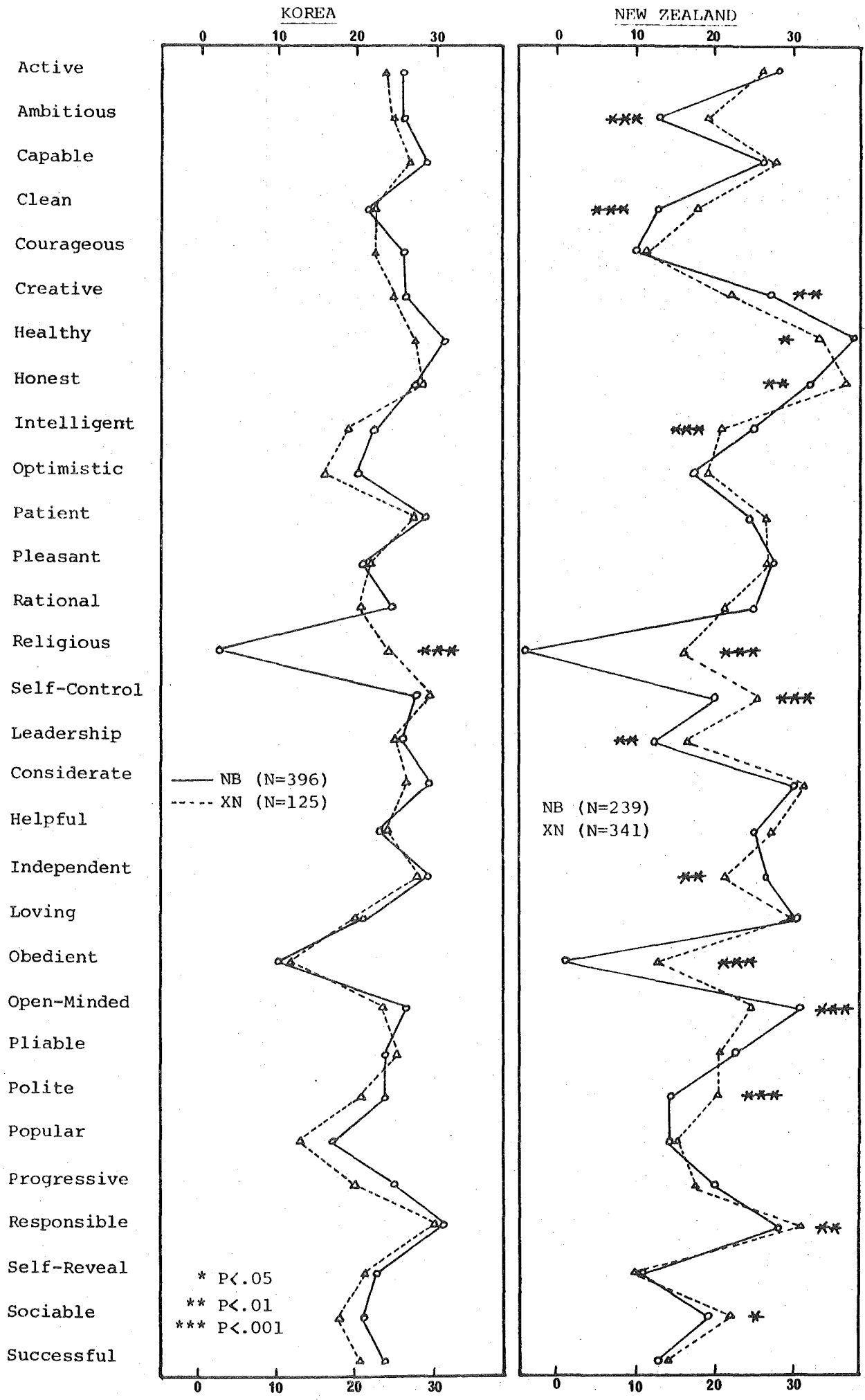
ITEMS	KOREA			N.Z.		
	NB (N=396)	XN (N=125)	DIFF (NB-XN)	NB (N=239)	XN (N=341)	DIFF (NB-XN)
Active	25.85	24.00	1.85	28.20	26.35	1.85
Ambitious	25.93	24.76	1.17	13.36	18.56	-5.20***
Capable	28.74	26.64	2.10	26.45	27.21	-0.76
Clean	22.18	22.44	-0.26	13.27	18.12	-4.85***
Courageous	25.77	22.88	2.89	9.76	11.20	-1.44
Creative	26.26	24.56	1.70	26.62	22.39	4.23**
Healthy	31.81	26.84	4.34	36.61	33.62	2.99*
Honest	27.18	27.24	-0.06	32.87	36.13	-3.26**
Intelligent	23.37	19.40	3.97	25.27	20.62	4.65***
Optimistic	19.91	16.04	3.87	17.38	19.38	-2.00
Patient	28.16	26.60	1.56	24.44	26.40	-1.96
Pleasant	21.19	20.72	0.47	27.41	27.27	0.14
Rational	24.14	21.20	2.94	24.51	21.77	2.74
Religious	3.01	24.08	-21.07***	-5.43	15.58	-21.01***
Self-Controlled	26.72	28.76	-2.04	19.76	24.65	-4.89***
Leadership	25.36	24.84	0.52	12.58	15.77	-3.19**
Considerate	28.90	27.00	1.90	29.89	30.91	-1.02
Helpful	24.12	24.32	-0.20	24.75	26.77	-2.02
Independent	28.48	28.28	0.20	26.11	22.31	3.80**
Loving	21.17	20.28	0.89	30.37	29.60	0.77
Obedient	9.99	11.88	-1.89	2.36	13.29	-10.93***
Open-Minded	25.83	23.96	1.87	30.78	24.67	6.11***
Pliable	24.22	24.64	0.42	22.49	20.87	1.62
Polite	23.59	20.60	2.99	14.46	21.43	-6.97***
Popular	17.08	12.56	4.52	14.57	15.43	-0.86
Progressive	24.72	19.64	5.08	19.51	17.97	1.54
Responsible	30.66	30.36	0.30	27.64	31.22	3.58**
Self-Revealing	22.56	22.20	0.36	10.90	10.31	0.59
Sociable	20.66	17.88	2.78	18.57	21.67	-3.10*
Successful	24.32	21.29	3.03	12.77	13.74	-0.97

* $p < .05$, ** $p < .01$, *** $p < .001$.

(see Appendix 9-4). Some, however, were in favour of the Non-Believers. These included the items Patient, Optimistic, Loving, Pleasant, Polite, Self-revealing, Sociable, Responsible and Considerate which produced no statistical significance, and Popular which produced a significant difference at $P < .10$ (see Appendix 9-4). Thus the findings are not in agreement with Hypothesis 5.

3) The Non-believers and Christians also did not differ from each other in their achievement-competence ideal self concepts

(FIGURE 7-5) IDEAL SELF CONCEPTS OF CHRISTIAN AND NON-BELIEVING GROUPS



with statistical significance, but the Non-believers were found to score higher in all these items (Active, Ambitious, Capable, Creative, Intelligent, Rational, Leadership, Independent and Successful). This tendency is in the same direction as that which the author had predicted in Hypothesis 5.

4) The items measuring conservativeness (Progressive, Pliable and Open-minded) were in favour of the Non-believers, although they did not produce significant differences between the groups. However, if we adopt a more liberal level of significance ($P < .10$), the item Progressive can be said to have significantly distinguished the Non-believers from the Christian. This in general is in the same direction with Hypothesis 5 which stated that the Non-believers would have less conservative ideal self concepts.

5) Although the Non-believers rated Courageous and Healthy higher, they were not found to be significantly different from the Christians in these aspects.

Based on these findings, we may conclude that in Korea although the Non-believers showed a more achievement-competence oriented and less conservative tendency in the conception of their ideal self, their ideal self concepts were not significantly different from that of the Christians. This seems to confirm our earlier finding (see Section I(ii) Religion-based Difference in Present Self Concepts) that religion (Christianity) is not an important differentiating factor in the self concepts of Korean young adults, and as in the case of our Hypothesis 2 for present self concepts, this does not support Hypothesis 5 with regard to the obvious pattern of distinction to be found between the Christians and Non-believers in Korea.

A comparison of the religion-based differences between the present (actual) and ideal self concepts of Korean young

adults reveals an increase in the positiveness of the Non-believers' moral-social ideal self concepts. The mean scores on 23 of the 30 items on the Present Self Concept Scale were in favour of the Christians, and among these 7 moral-social oriented traits showed significant differences (see Table 7-5). On the Ideal Self Concept Scale, however, 24 of the 30 items were found to be in favour of the Non-believers, and these included most of the moral-social oriented traits. This may be partly due to the absence of high school subjects in the analysis for the findings in ideal self concepts.

Among New Zealand young adults (university students):

1) As in the case of the Korean sample, the item Religious produced an extreme difference ($\text{diff} = 21.01, P < .001$) between the Christians and Non-believers favouring the former.

2) Significant differences between the two groups were found in the moral-social oriented ideal self concepts. The Christians scored significantly higher than the Non-believers in the following items: Clean ($P < .001$), Honest ($P < .01$), Self-controlled ($P < .001$), Obedient ($P < .001$), Polite ($P < .001$), Sociable ($P < .05$). Items like Optimistic, Patient, Considerate, Helpful and Popular were also in favour of the Christians although they did not show statistical significance. Three items (Pleasant, Loving and Self-revealing), however, were in favour of the Non-believers, but the magnitude of differences were so small (.14, .77 and .59 respectively) that they could be regarded as negligible. Hence the general pattern still tended to be in favour of the Christians and so it can be concluded that our findings concerning the moral-social oriented ideal self concepts of New Zealand young adults are consonant with Hypothesis 5.

3) Many of the achievement-competence oriented traits (with the exception of Ambitious and Leadership) received significantly higher scores from the Non-believers than from the Christians: Creative ($P < .01$), Intelligent ($P < .001$), Rational ($P < .051$), Independent ($P < .01$), and Responsible ($P < .01$). The item Active, though showing no significance, is also in favour of the Non-believers (diff = 1.85). Other items like Capable, Successful, however, were in favour of the Christians, but the differences were negligible (.76 and .97 respectively). This again is also in agreement with Hypothesis 5.

4) The items measuring conservativeness (Open-minded, Pliable and Progressive) were in favour of the Non-believers with Open-minded showing a great significance (diff = 6.11, $P < .001$). This general pattern, showing the conservative tendency of the New Zealand Christians when compared with the New Zealand Non-believers, is also consonant with the prediction in Hypothesis 5.

5) The items Courageous and Healthy were found to be in favour of the Christians and Non-believers respectively, but only Healthy showed as statistical significance.

From these results, one may see that the hypothesis that New Zealand young adults with Christian backgrounds have moral-social, conservative ideal self concepts, whereas non-believing young adults have achievement-competence, non-conservative ideal self concepts is well supported. It is regrettable that there are no empirical studies on the ideal self concepts in relation to religious background in the literature. However, the pattern revealed here is in agreement with the findings of previous researchers (e.g., Rokeach 1969, 1970; Brown and Lowe, 1951;

Coates, 1973) on the religion-based differences on actual self concepts or values. As a matter of fact, our present findings show that in the case of New Zealand young adults, compared with their present self concepts, their ideal self concepts are even more consonant with the description of the actual self concept by the previous researchers, especially along the achievement-competence dimension (see Table 7-5). However, as on the Present Self Concept Scale, the items Ambitious and Leadership were considered highly desirable by the Christians as attributes for their ideal self (Ambitious, $P < .001$: Leadership, $P < .01$). Perhaps this is the result of the many church activities which are directly and indirectly geared to produce leaders among young people.

A comparison of the degree of distinctiveness of the patterns of religion-based differences on the ideal self concepts of the Korean and New Zealand young adults reveals the reverse of what Hypothesis 5 predicted : the pattern of religion-based differences was more distinctive among New Zealand young adults than among Korean young adults. As explained in the section on religion and present self concepts, the phenomenon seems to be reviewed in a cultural perspective (see Section I (ii)). Moreover, when the effects of religion (Christianity) on self concepts are measured among Korean people, a more detailed and precise definition of "Christian beliefs" seems to be required. In the present study, however, religious identification was determined from a questionnaire item asking the respondent to describe his religion and all Protestant denominations and Catholics were dealt as Christianity as a broad religious system. As shown by Rokeach (1969, 1970) as well as Glock and Stark (1966), even in Western societies Protestants

are far from being homogeneous in their values and religious orientation and there are often greater differences within the various Protestant denominations than between Protestants and Non-believers.

Interestingly enough, although religion appeared to be a very significant factor in differentiating ideal self concepts between the Christians and Non-believers in New Zealand, it is also noted that some of cardinal Christian virtues such as being Loving, Patient, Optimistic, Considerate, and Helpful did not significantly distinguish the Christians from the Non-believers. This can be explained by the general recognition of secular humanism which upholds the dignity of man and fosters the spirit of helping others in trouble.

In summary, the present findings show that in Korea the pattern of ideal self concepts were quite similar when comparisons are made between Christian and Non-believing young adults (university students) except on the item Religious, but in New Zealand they in general appeared to be very significantly different (on 15 of the 30 items) — they differed along the achievement-competence oriented and non-conservativeness dimensions favouring the Non-believers and along the moral-social oriented and conservativeness dimensions in favour of the Christians. The present findings also show that there were traits desirable for ideal self concepts commonly shared by the two groups in both cultures. These included some of the achievement-competence as well as moral-social oriented traits (Active, Capable, Courageous, Progressive, Successful, Optimistic, Patient, Pleasant, Loving, Helpful, Considerate and Popular) which can be considered the basic values and ideals cherished by the people in both societies regardless of religious backgrounds.

II(iii). EDUCATIONAL DIFFERENCES IN IDEAL SELF CONCEPT : TEST
OF HYPOTHESIS 6

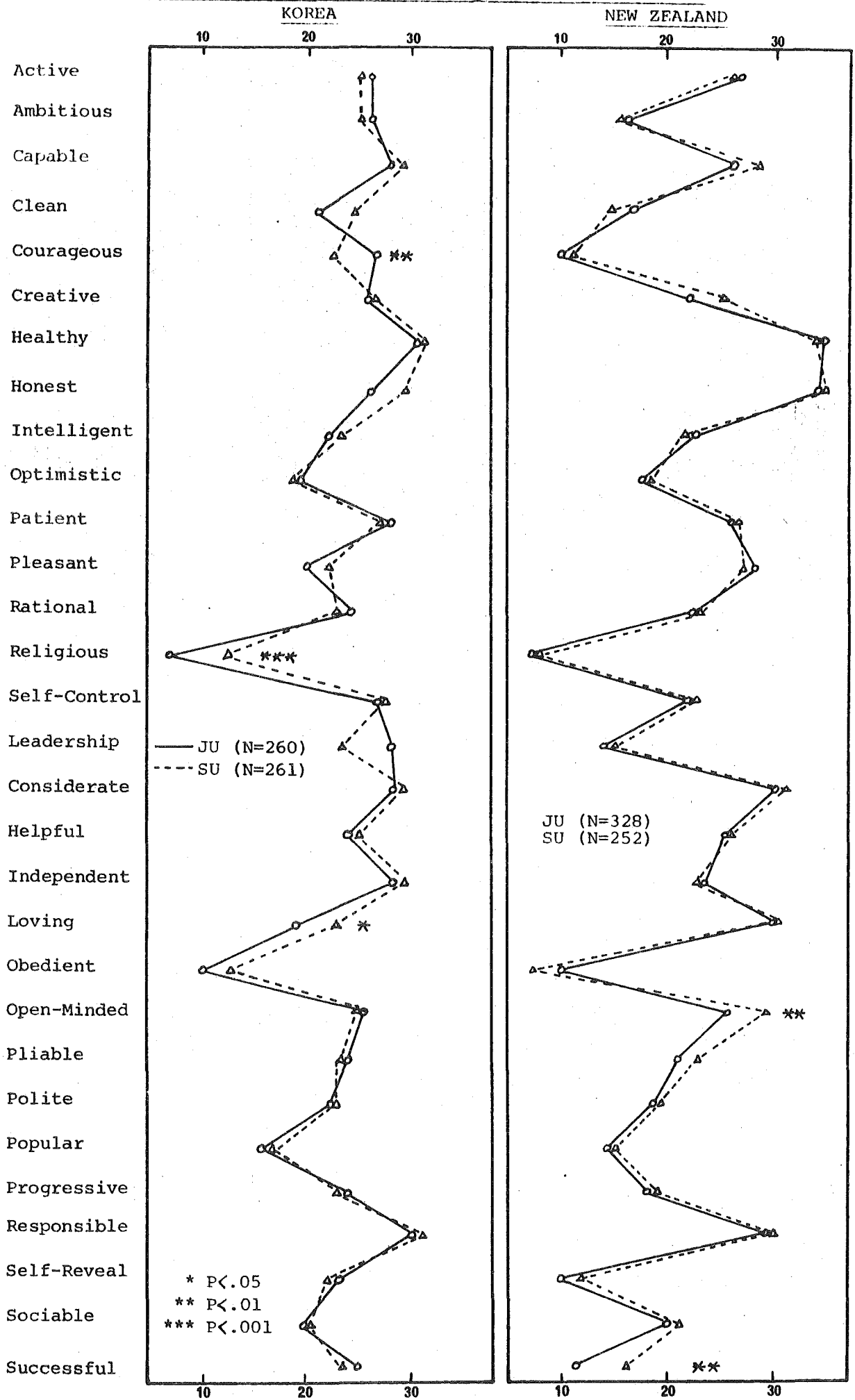
Table 7-12 shows the mean scores of the thirty items on the Ideal Self Concept Scale for the Junior University (JU) students and Senior University (SU) students. It also presents the significance level of the univariate F tests of which the detailed results for the Korean sample can be seen in Appendix 9-2 and those for the New Zealand sample in Appendix 10-2. The graphical presentation of these results is shown in Figure 7-6.

(TABLE 7-12) MEANS OF IDEAL SELF CONCEPTS FOR THE JUNIOR AND SENIOR UNIVERSITY
STUDENTS

ITEMS	KOREA			N.Z.		
	JU (N=260)	SU (N=261)	DIFF (JU-SU)	JU (N=328)	SU (N=252)	DIFF (JU-SU)
Active	26.23	24.90	1.33	27.21	27.00	0.21
Ambitious	26.28	25.38	0.90	16.43	16.39	0.04
Capable	27.59	29.13	-1.54	26.36	27.60	-0.90
Clean	20.71	23.79	-3.08	17.28	14.62	2.66
Courageous	27.06	23.17	3.89**	10.19	11.15	-0.96
Creative	25.81	26.14	-0.33	23.20	25.34	-2.14
Healthy	30.55	30.90	-0.35	34.52	35.29	-0.77
Honest	26.31	28.74	-2.43	34.68	34.93	-0.25
Intelligent	21.91	23.29	-1.38	23.36	21.46	1.90
Optimistic	19.24	18.63	0.61	18.06	19.20	-1.20
Patient	28.19	27.40	0.79	25.57	25.62	-0.05
Pleasant	20.02	22.13	-2.11	27.72	26.87	0.90
Rational	23.54	23.18	0.36	23.21	22.50	0.71
Religious	6.43	11.75	-5.32***	6.83	7.04	-0.21
Self-Controlled	27.21	27.35	-0.14	22.42	22.92	-0.50
Leadership	26.72	24.15	2.57	13.91	15.16	-1.25
Considerate	27.66	29.10	-1.44	29.88	31.28	-1.40
Helpful	23.60	25.26	-1.66	25.84	26.07	-0.23
Independent	28.27	29.24	-0.97	24.19	23.47	0.72
Loving	19.20	22.73	-3.53*	29.91	29.93	-0.02
Obedient	9.68	11.94	-2.26	9.84	7.41	2.43
Open-Minded	25.38	25.26	0.12	25.83	28.95	-3.21**
Pliable	24.15	24.10	0.05	20.64	22.70	-2.06
Polite	22.82	23.10	-0.28	18.59	18.70	-0.11
Popular	15.83	16.64	-0.81	15.00	15.17	-0.17
Progressive	24.29	22.65	1.64	18.04	19.35	-1.31
Responsible	30.32	31.06	-0.74	29.34	30.28	-0.94
Self-Revealing	22.57	21.94	0.63	9.70	11.67	-1.97
Sociable	19.78	20.19	-0.41	20.23	20.62	-0.39
Successful	24.45	23.70	0.75	11.69	15.49	-3.80**

* $P < .05$, ** $P < .01$, *** $P < .001$

(FIGURE 7-6) IDEAL SELF CONCEPTS OF JU AND SU GROUPS



The findings represented in Table 7-12 and Figure 7-6 can be summarized as follows.

Among both Korean and New Zealand young adults:

1) The JU and SU groups showed a very similar degree of positiveness on all items except on three for the Korean sample and two for the New Zealand sample, thus indicating that ideal self concepts of junior university and senior university students (in general) are not significantly different from each other. These findings are consistent with those on the Present Self Concept Scale for both the Korean and New Zealand samples.

2) For the Korean sample, three items produced significant differences between the two groups: Courageous ($P < .01$) favouring the JU group and Religious ($P < .001$) and Loving ($P < .05$) favouring the SU group, while for the New Zealand sample two items (Open-minded and Successful) yielded significant differences favouring the SU group at the P level of .01.

The most striking observation from the above results is that in general there was no significant difference in ideal self concepts between the JU and SU groups in both Korean and New Zealand samples. This pattern is perfectly consistent with that which was found in the actual self concepts among both Korean and New Zealand university students. This phenomenon could well be interpreted in the same way as we explained the absence of differences in actual self concepts: first, regardless of the duration of university experience there are characteristics and ideals (e.g., strong achievement motivation for a career of the future, and life-goals) commonly held by university students; secondly, the university education and general environment of the campus (youth culture) would

contribute to the accentuation of those characteristics — hence producing similar beliefs, values and ideals. The problem here is that students may have general career motivation but not have any specific career in mind until some time after they have entered university.

In Hypothesis 6, however, it was postulated that during the university period, both Korean and New Zealand young adults would show a decrease in the positiveness of their ideal self concepts. This postulation was based on the assumption that junior students are less aware of the harsh reality of life (such as the strife and worries concerning their careers) and therefore reveal more wishful-thinking and less realistic attitudes about their ideal self. This assumption is closely related to Lewin's description of increased differentiation along the reality-irreality dimension as a function of age (Lewin, 1946). It was also hypothesized that because of the general atmosphere of the Korean society which is more hierarchical and competitive with an economically harsher life, the Korean senior university students would tend to acquire a more realistic attitude towards their future and ideals, thus showing less positiveness in their ideal self concepts.

However, the present results as presented in Table 7-12 and Figure 7-6, showed almost identical ideal self concepts between the JU and SU groups in both cultures. This seems to indicate that the stability of ideal self concept is attained by the age the young adults attend university and that the junior university students in both cultures are sufficiently mature to make connection between the reality and their ideals. Therefore, Hypothesis 6 was not supported by the present study.

Nor are our results in accordance with the theory and empirical findings of Zigler and his colleagues (e.g. Katz and Zigler, 1967; Achenbach and Zigler, 1963; Zigler and Phillips, 1960) who reported higher positiveness in ideal self concepts with increasing age among adolescents and adults.

In spite of the widespread interest in the ideal self, surprisingly little is known about changes in the ideal self concept during young adulthood. Our findings, nevertheless, may be related to those of Havighurst and McDonald (1955). They investigated the development of the ideal self of New Zealand adolescents and found that most young New Zealanders reach psychological maturity in late adolescence (approximately 16 years of age). Their findings are in the same line with the argument of McCandless (1961) who stated that ideal self images do not ordinarily show much variation, once the individuals have reached maturity.

There are, however, a few items which produced statistical significance between the JU and SU groups in both cultures. Although three items (Courageous, Religious, Loving) in the Korean sample and two items (Open-minded, Successful) in the New Zealand sample showed significant differences between the two groups, interpretation seems to be almost impossible. As Feather (1973) has pointed out, these interpretive difficulties are characteristic of most studies concerning the impact of university experience on students. Nonetheless, some tentative explanations are offered for the phenomenon.

Firstly a close examination of the social and cultural climate on the Korean campus may shed some light on the peculiar response their students show on the items Religious and Loving.

Contrary to the findings of previous researches conducted

in the European cultures where university experience is found to affect the student's religious attitude in a direction towards a more liberal religious outlook and a declining commitment to religion, the Korean sample indicated a pattern of $JU < SU$ (this pattern can also be found on the Present (Actual) Self Concept Scale for the items Religious and Loving). The New Zealand sample, although did not show a typical European pattern as described above, at least showed a pattern of $JU \approx SU$ for both items. As for the Korean pattern, it may, perhaps, be directly related to the proportion of anxiety or security they feel. The strife and anxiety connected with the University Entrance Exam are replaced by a sense of confidence or even triumph once they are admitted to the university which is one of the most prestigious one in Korea (see Chapter 4). However, this sense of success and security is undermined as they approach another competition that determines their careers — the scramble for jobs: the numerous selection procedures run by the potential employers as well as the final exams in the university. In such an emotional state, probably religion and friendship will be of great help; hence the items Religious and Loving receive higher score on the Ideal Scale. Nevertheless, there is no empirical evidence for such a cause-effect relationship yet.

Secondly, on both the Actual and Ideal Self Concept Scales, the New Zealand university groups yielded significant differences on the item Open-minded ($P < .01$), indicating a pattern of $JU < SU$. This is in accordance with the findings of previous researchers who, however, conducted their studies on actual self concept only. According to their reports (Feldman and Newcomb, 1969; Little, 1970; Garrison, 1961), the senior

university students are less conservative, less prejudiced, less authoritarian and more tolerant than the junior university students, hence they conclude that university education has a liberating influence on the students who show an increasing openness to new experiences as they proceed in their pursuit of knowledge. However, these changes may also be merely natural changes as the young adults mature with age, as argued by Plant and Telford (1966). In the case of the Korean sample, such a pattern of change is not apparent, which perhaps is a reflection of the social and intellectual orientation on their campus. Yet again, there is no empirical evidence to allow us to make the connection with certainty.

Thirdly, the two cultural samples also showed an interesting difference in their response to the item Successful. The pattern for the New Zealand sample is basically $JU < SU$, though on the Actual Self Concept Scale it yielded no statistical significance, but on the Ideal Scale, the significance was at a level of $P < .01$. The increase in desirability of this item may be related to the fact that these senior students are on the point of entering the society and starting their careers. The Korean sample, curiously enough, showed a reversed pattern ($JU > SU$). On the Actual Self Concept Scale, the SU group scored considerably lower. This, perhaps, is related to the wearing away of their initial sense of success and triumph on entering the university as they proceed in their studies. All the same, the results on the Ideal Scale showed that the item Successful is equally desirable to both groups.

In summary, the present results strongly suggest that in both cultures the JU and SU groups, despite some differences,

have in general very similar ideal self concepts, irrespective of the amount of their educational experience in the university. This phenomenon may be explained in the following way:

1) regardless of the duration of university experience there are common characteristics and ideals (e.g., high level of aspiration and achievement values) and 2) these characteristics and ideals are further accentuated by university education and the general environment of the campus.

III. MANOVA ANALYSES OF SOCIAL CLASS DIFFERENCES IN ACTUAL SELF CONCEPT : TEST OF HYPOTHESIS 7

In the present analysis of social class differences in present (actual) self concepts, a few points need clarification. Firstly, the subjects only included the high school sample (see Chapter 6). Secondly, in New Zealand the socio-economic status (SES) of the subjects were determined by the location of the schools, i.e. whether it was situated in a well-off residential area or an area where there were many state houses. Thirdly, in Korea, SES of the students were in correspondence to the type of schools they attended, i.e. whether it was an academic school (college-bound), or a vocational school (see Chapter 6). Finally, although the subjects were not classified individually in this analysis, a close examination of fathers' occupation reveals that our basis of classification, taking the schools as representatives of certain socio-economic group, is justified (see Chapter 6 for details).

In Table 7-13, the mean scores and standard deviations on the Present Self Concept Scale of the two groups in both cultures are tabulated and compared. It is found that the SDs for the Korean groups in general are slightly larger than

(TABLE 7-13) MEANS AND SDs OF ACTUAL SELF CONCEPTS FOR HIGH AND LOW STATUS HIGH SCHOOL STUDENTS

	KOREA			N.Z.		
	HIGH (SD) (N=177)	LOW (SD) (N=172)	DIFF (H-L)	HIGH (SD) (N=230)	LOW (SD) (N=133)	DIFF (H-L)
Active	13.33 (21.10)	11.48 (24.00)	1.85	20.47 (19.10)	22.86 (22.56)	-2.39
Ambitious	21.47 (19.81)	18.66 (24.25)	2.81	13.76 (19.44)	18.42 (19.31)	-4.66*
Capable	19.04 (17.88)	11.77 (20.57)	7.27***	15.02 (15.68)	19.14 (17.84)	-4.12
Clean	17.77 (21.23)	19.88 (22.47)	-2.11	20.57 (18.65)	26.37 (19.09)	-5.80**
Courageous	12.42 (21.99)	5.55 (24.52)	6.87**	5.06 (17.20)	6.46 (18.31)	-1.40
Creative	15.48 (19.79)	13.14 (24.20)	2.34	8.00 (21.20)	11.92 (21.16)	-3.92
Healthy	19.05 (24.33)	15.19 (25.48)	3.86	21.17 (19.32)	27.51 (21.73)	-6.34**
Honest	24.12 (20.66)	18.30 (24.50)	5.82*	21.04 (18.65)	21.78 (22.99)	-0.74
Intelligent	18.96 (19.60)	14.94 (19.03)	4.02	17.19 (16.95)	17.33 (19.01)	-0.14
Optimistic	20.61 (23.36)	15.61 (25.70)	5.00	12.97 (21.43)	18.71 (21.47)	-5.74*
Patient	18.96 (23.87)	17.94 (25.84)	1.02	9.46 (20.95)	6.71 (25.85)	2.75
Pleasant	19.68 (21.58)	16.02 (24.04)	3.66	16.50 (18.08)	18.79 (20.64)	-2.29
Rational	15.15 (20.34)	10.93 (23.74)	4.22	12.62 (16.28)	14.05 (20.09)	-1.43
Religious	0.51 (30.10)	-1.61 (30.48)	2.12	2.84 (31.47)	-11.96 (29.09)	14.80***
Self- Controlled	12.67 (21.60)	10.48 (23.95)	2.19	10.09 (20.02)	12.93 (20.91)	-2.84
Leadership	8.67 (22.97)	4.86 (25.06)	3.81	11.22 (19.76)	13.59 (22.67)	-2.37
Considerate	19.94 (20.56)	21.54 (21.34)	-1.60	16.92 (16.40)	19.68 (18.64)	-2.76
Helpful	20.38 (20.57)	21.34 (20.23)	-0.96	14.96 (16.95)	14.62 (21.17)	0.34
Independent	19.10 (22.65)	17.09 (23.25)	2.01	17.10 (19.16)	20.10 (21.11)	-3.00
Loving	19.78 (20.05)	15.61 (22.20)	4.17	16.41 (18.67)	22.08 (21.35)	-5.67**
Obedient	16.10 (22.85)	13.78 (25.37)	2.32	7.10 (19.65)	8.25 (22.66)	-1.15
Open-Minded	12.88 (22.61)	11.77 (21.13)	1.11	19.62 (19.50)	24.02 (19.43)	-4.40*
Pliable	15.64 (20.84)	13.95 (23.51)	1.69	12.90 (18.71)	16.86 (22.04)	-3.96

(continued over)

(TABLE 7-13) MEANS AND SDs OF ACTUAL SELF CONCEPTS FOR HIGH AND LOW STATUS HIGH SCHOOL STUDENTS (CONTD.)

ITEMS	KOREA			N.Z.		
	HIGH (SD) (N=177)	LOW (SD) (N=172)	DIFF (H-L)	HIGH (SD) (N=230)	LOW (SD) (N=133)	DIFF (H-L)
Polite	22.06 (18.70)	21.74 (20.99)	0.32	18.34 (17.78)	22.07 (19.48)	-3.73
Popular	13.14 (21.53)	9.33 (22.88)	3.81	9.83 (16.86)	18.53 (21.40)	-8.70***
Progressive	14.05 (21.89)	10.86 (22.57)	3.19	11.24 (15.06)	15.51 (19.17)	-4.27*
Responsible	25.53 (17.36)	21.40 (21.88)	4.13	19.07 (17.34)	22.58 (20.25)	-3.51
Self-revealing	6.57 (25.26)	9.56 (25.61)	-2.99	4.17 (20.78)	8.91 (20.69)	-4.74*
Sociable	11.46 (22.63)	8.81 (27.34)	2.65	15.12 (20.65)	24.05 (21.18)	-8.93***
Successful	17.20 (22.77)	17.06 (24.68)	0.14	6.80 (16.24)	10.41 (18.43)	-3.61

* $P < .05$, ** $P < .01$, *** $P < .001$

those for the New Zealand groups, and that in both societies, the SDs for the groups with lower socio-economic backgrounds (from now on called Low Groups) are slightly larger than those for the groups with higher socio-economic backgrounds (from now on called High Groups). This suggests that the scores of the Korean groups showed more spread than the New Zealand groups and that the Low Groups in both cultures showed more dispersion than the High Groups. Besides these, Table 7-13 also shows the differences between the High Groups and the Low Groups in both cultures. Their significance level was determined after a MANOVA including univariate F tests was performed for each culture, the results of which are presented in Table 7-14 and 7-15.

Both Table 7-14 and Table 7-15 indicate that only one dimensional system was found to be differentiating between the High Groups and the Low Groups, and on that dimension the SES effects

(TABLE 7-14) THE RESULTS OF THE MANOVA FOR SOCIAL CLASS EFFECT AND CANONICAL CORRELATION (R) - KOREA

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R	REFERENCE FOR UNIVARIATE F
1 through 1	1.616	30.00	318.00	.024	.364	Appendix 11

(TABLE 7-15) THE RESULTS OF THE MANOVA FOR SOCIAL CLASS EFFECT AND CANONICAL CORRELATION (R) - N.Z.

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R	REFERENCE FOR UNIVARIATE F
1 through 1	2.066	30.00	332.00	0.001	.397	Appendix 12

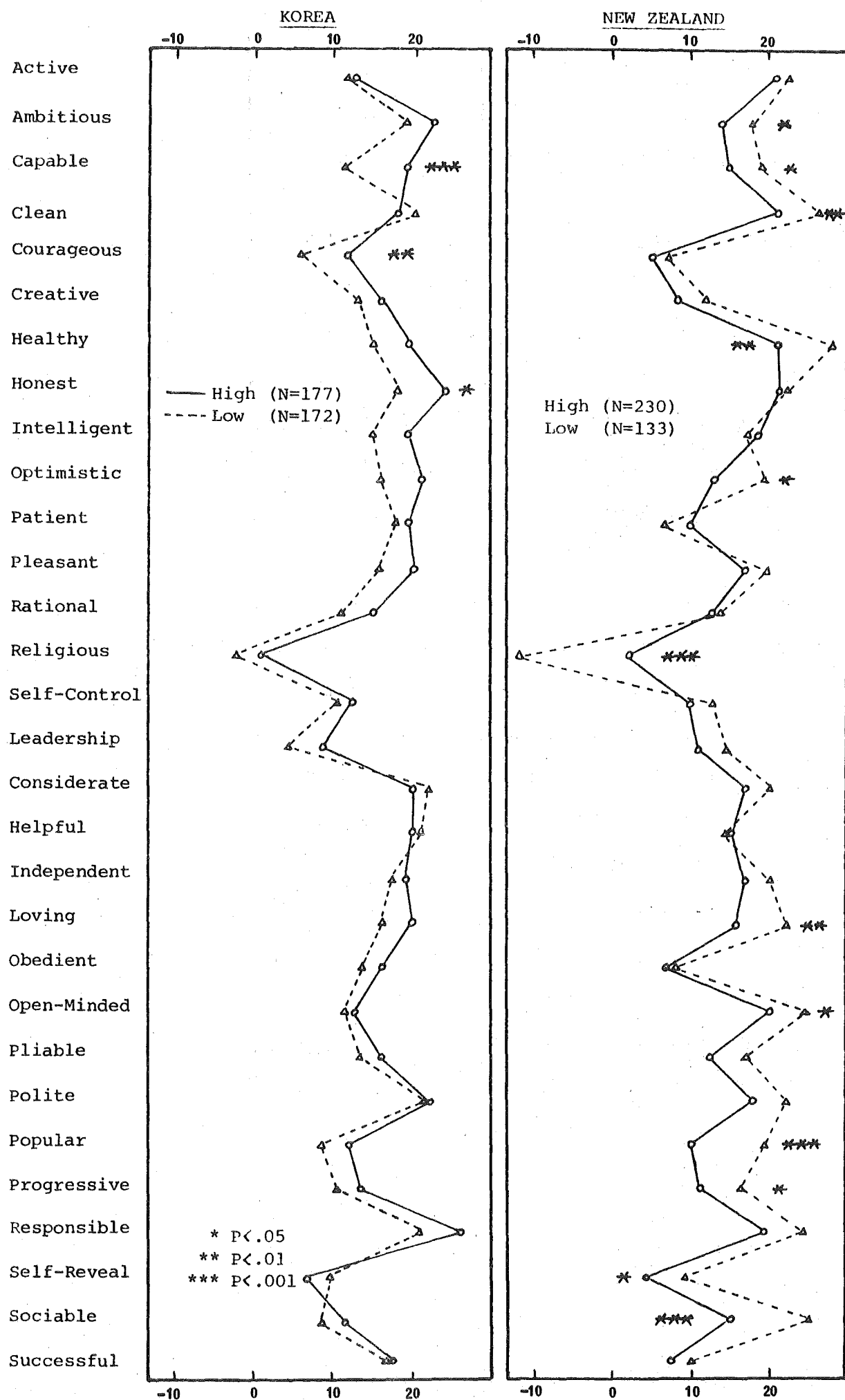
were found to be statistically significant in both cultures. The Wilks Lambda P value of the New Zealand sample, however, was more significant ($P < .001$) than that of the Korean sample ($P < .024$). In these tables, it is indicated that there were definite differences between the High Groups and Low Groups in both Korea and New Zealand. Nevertheless, an inspection of the tables of univariate F tests (see Appendices 11 and 12) showed that these significant SES effects were mainly caused by three items in the Korean sample and by thirteen items in the New Zealand sample. Their significance levels have been reported in Table 7-13 and the results will be discussed in detail below.

As shown in Table 7-13 and Figure 7-7 our findings can be summarized as follows.

Among Korean young adults (senior high school students):

1) With the exception of Clean, Considerate, Helpful and Self-revealing, all other items were perceived more positively

(FIGURE 7-7) ACTUAL SELF CONCEPTS OF HIGHER AND LOWER SES GROUPS



by the High Group. However, only three items (Capable, Courageous and Honest) showed significant differences. Hence it may be stated that in general, the High Group and Low Group in Korea are not significantly different from each other in their self concepts (actual).

2) The High Group and Low Group did not significantly differ from each other in their moral-social oriented self concepts in any distinctive pattern. Although four moral-social oriented traits (Clean, Considerate, Self-revealing and Helpful) were in favour of the Low Group, they showed no statistical significance. The other moral-social oriented traits, however, were in favour of the High Group students. These included Honest, Patient, Pleasant, Religious, Self-controlled, Responsible, Loving, Open-minded, Pliable, Optimistic, Polite, Popular and Sociable. Of these Honest showed a statistical significance at the level of $P < .05$, Optimistic at the $P < .058$, Loving at the $P < .066$ and Responsible at the $P < .051$ (see Appendix 11). Thus the findings tended to be in the opposite direction to what was predicted in Hypothesis 7.

3) The High Group and Low Group generally did not significantly differ from each other in their achievement-competence self concepts. However, the High Group was found to score higher on all of the following items: Active, Ambitious, Capable, Courageous, Creative, Intelligent, Rational, Leadership, Independent, Progressive and Successful. Of these, Capable produced significant difference at the $P < .001$, Courageous at the $P < .01$ and Intelligent at the $P < .053$. This tendency is in the same direction as that which the author predicted in Hypothesis 7.

4) Although the High Group rated Healthy higher, it was

not found to be significantly different from the Low group.

From the above findings, it can be concluded that in Korea, the High Group and Low Group did not show significant differences in self concepts, although the students from the High Group were found to have slightly more positive self concepts than the students from the Low Group. Therefore Hypothesis 5 concerning the pattern of social class differences in self concept was not confirmed by the Korean sample.

Our findings are not in agreement with the findings commonly found in previous researches (e.g., Rosen, 1956; Bieri and Lobeck, 1961; McDonald, 1968; Rokeach, 1969; Hara, 1972; Feather, 1975) which demonstrated a significant relationship between social class and self concepts, or moral-social (interpersonal) oriented self concepts for the subjects with lower SES and achievement-competence oriented self concepts for the subjects with higher SES. This again seems to indicate that there exists in Korea a different pattern of social class differences in self concepts from that in Western society.

However, our findings are consonant with those of McDonald and Gynther, and Prendergast et al. as well as Coopersmith. They reported no significant effects of social class on various aspects of self concepts such as "Love and Dominance" (McDonald and Gynther, 1965), ability, appearance and interpersonal relations (Prendergast et al., 1974), and self-esteem (Coopersmith, 1967). These studies further indicate that, as found in the present study, subjects with higher SES are likely to express more favourable self-attitudes than those with lower SES, although there is no clear and definite pattern of relationships between self concepts and social class.

The apparent lack of congruence between self concepts

and socio-economic environment among Korean young adults seems to indicate that norms or other characteristic aspects of subcultural experiences are more important than general social prestige as determinants of self concept. As Rosenberg (1965) insisted, one must recognise that when dealing with young adults, their location in the stratification system is not based upon their personal achievements but upon the prestige of their parents. It is thus possible that within this age group, school life (keen competition for academic achievement and successful relationship with teachers which may affect their prospects in getting jobs later) and peer group rather than prestige in the broader society may have a stronger influence on the individual's self image regardless of the nature of the schools they attend (academic or vocational schools).

Another possible explanation of these discrepancies may be found in the classification of the SES of the subjects, which was accounted for at the beginning of this section. Using the type of the schools as the indicator of the SES of the students may be a less precise index measuring the SES than the educational level or occupations of fathers, as proved by Watkins (1976) in his study on the factors affecting self-esteem.

Among New Zealand young adults (senior high school students):

- 1) The Low Group in general had more positive self concepts than the High Group. Of the 12 items showing statistical significance (Ambitious, Capable, Progressive, Clean, Healthy, Loving, Optimistic, Open-minded, Popular, Self-Revealing, Sociable and Religious), only one item (Religious) was in favour of the High Group. The other items, except Patient and

Helpful, were also in favour of the Low Group, although they showed no statistical significance.

2) All moral-social oriented traits except Patient, Helpful and Religious were in favour of the Low Group. These included the items Clean ($P < .01$), Optimistic ($P < .05$), Loving ($P < .01$), Open-minded ($P < .05$), Popular ($P < .001$), Sociable ($P < .001$) and Self-revealing ($P < .05$) which produced statistical significance, and eight other moral-social oriented traits (Honest, Pliable, Pleasant, Self-controlled, Considerate, Obedient, Polite and Responsible) which showed no statistical significance. Thus these findings are in agreement with Hypothesis 7 which postulated that New Zealand young adults with lower SES show more positiveness in moral-social oriented traits than the young adults with higher SES.

3) The Low Group was also found to score higher than the High Group on all the achievement-competence oriented traits: Active, Ambitious, Capable, Courageous, Creative, Intelligent, Rational, Leadership, Independent, Progressive and Successful. Of these, Ambitious, Capable and Progressive produced significant differences between the two groups at the level of $P < .05$. This tendency is in the opposite direction to that which the author predicted in Hypothesis 7.

4) The item Healthy significantly ($P < .01$) favoured the Low Group. This could mean a greater anxiety about health or a greater interest in sport, or a competition for lack of intellectual achievement.

5) Religious was the only item favouring the High Group with great significance (diff = 14.80, $P < .001$).

On the basis of the above findings, it is concluded that in New Zealand, the High Group and Low Group students

considerably differed in their self concepts: the Low Group students generally have more positive self concepts along the achievement-competence oriented dimension as well as the moral-social oriented dimension. These findings are partly inconsistent with our hypothesis and with those commonly observed in previous researches (e.g., Rosenberg, 1965; McDonald, 1968; Rokeach, 1969) in the way that students with higher SES have more positive achievement-competence oriented self concepts than students with lower SES.

Our findings, however, are in agreement with those of Soares and Soares (1969, 1970-71); Williams and Byars (1968), as well as Powers et al. (1971) who reported higher self concept scores among the subjects attending school in disadvantaged areas than among those attending school in advantaged areas.

Such a phenomenon may be explained by social learning principles (Soares and Soares, 1969, 1970-71). Many disadvantaged students are mainly exposed to other disadvantaged people at school as well as at home and in their neighbourhood. They are reinforced by their family, friends and teachers who, in turn, may generally expect less of them in terms of achievement and socially approved behaviour. Since they function according to these expectations and do not measure themselves against the advantaged people, they are more likely to be satisfied with themselves — and hence have more positive self concepts. On the other hand, advantaged students associate mostly with other advantaged people at school and at home. Thus, the demand and pressure exerted on them by their parents and other adults are generally greater than those on the disadvantaged young adults. If they do not measure up to their expectations, the results may be less positive self concepts.

It is also possible to explain such a phenomenon as a reaction to the insecurity and inferiority generally experienced by people from a lower SES. Because of their disadvantaged economic and social conditions, they tend to be more aggressive, self-assertive and defensive. In fact it is not surprising that they should attempt to maintain the integrity of the self through self-assertion and a high level of defensiveness. This may contribute to the pattern of differences between the two groups in New Zealand.

For the cross-cultural comparison, it was postulated that there would be more distinctive differences in self concepts between the High Group and the Low Group among Korean young adults than among New Zealand young adults, because of the highly stratified nature of the Korean social structure (see Two Different Societies, Socialization and School Systems in Chapter 4). As shown in Table 7-13 and Figure 7-7, however, the results of the present study show that social class was not a significant factor differentiating self concepts of Korean young adults, although students of the High Group tended to have more positive self concepts than students of the Low Group. In New Zealand, on the other hand, social class seems to be of considerable significance in differentiating self concepts between the High Group and the Low Group. Therefore, Hypothesis 7 concerning the cross-cultural comparison was not supported.

One other interesting observation made in the comparison between the two patterns is that among Korean young adults, the High Group scored higher on 26 out of the 30 items (with 3 items showing significant differences), whereas among New Zealand young adults, the Low Group scored higher on 27 out of

the 30 items (with 11 items showing significant differences). This seems to mirror the nature of the two different societies — the highly stratified Korean society and the more egalitarian New Zealand society. In Korean society it is commonly observed that young adults from lower SES are more exposed than their New Zealand counterparts to learning conditions in which the relative inferiority of their economic and social situation may be translated into self-feelings. Conversely young adults from higher SES are more associated than their New Zealand counterparts with conditions of social prestige and power, thus promoting a greater feeling of self-confidence and dominance. A comparison of two groups at the extremes of the SES continuum in such a society, therefore, may reveal a pattern of differences in self concepts highly in favour of the groups with a high SES — a pattern which can be traced in the findings on our Korean sample, though it is not as prominent as it should be for the reasons stated at the beginning of this section.

Another interesting point can be found in comparing the items which produced significant differences between the High and Low Groups in each culture. In the case of Korea, there were only 3 items (Capable, Courageous and Honest) which showed statistical significance. On the basis of this evidence, it can be concluded that since the effect of social class on self concepts of the Korean young adults are limited to a few traits only, it is difficult to differentiate the Korean young adults of High and Low Groups in terms of achievement-competence vs moral-social oriented self concepts. On the other hand, although the New Zealand Low Group is found to have more positive self concepts than the High Groups along

both moral-social and achievement-competence oriented dimensions, there are more moral-social oriented items (7 items - Sociable, Popular, Self-revealing, Open-minded, Loving, Optimistic and Clean) than achievement-competence oriented items (3 items - Ambitious, Capable, Progressive), thus indicating that the two groups differ more on the social (moral) oriented dimension than on the achievement-competence oriented dimension. A peculiar finding among New Zealand young adults is that the students of the High Group saw themselves as remarkably more Religious (diff = 14.8, $P < .001$) than the students of the Low Group. This finding seems to reflect the fact that in our sample, there are more Christians in the High Group than in the Low Group.

In summary, certain cross-cultural differences stand out which seem to be functions of specific experiences in the different social settings. Among Korean young adults, social class was not significantly related to self concepts, although the High Group in general has more positive self concepts. Among New Zealand young adults, on the other hand, social class was strongly related to self concepts : the Low Group showed more positive self concepts along the achievement-competence oriented dimension as well as the social (moral) oriented dimension. These findings for both cultures seem to support the notion that self concept is a product of the daily interactions of people within the specific groups to which they belong rather than the product of general social prestige. In other words, we are taking a social learning view of the phenomenon rather than accepting a sociological explanation.

IV. MANOVA ANALYSES OF SUBJECTIVE CHANGES IN SELF CONCEPT :
TEST OF HYPOTHESIS 8

The focus of attention in this section is on "directionality", one of the four dimensions in time perspective formulated by Kastenbaum (1961). Within this framework an attempt has been made to examine the general direction of subjective changes in self concepts among young adults from the past (two years ago) through the present to the future (two years ahead).

In the questionnaire, the scores on each item for the Past and Future self concepts, unlike those on the scale of the Present self concept, do not directly represent the subjects' perception of themselves at those specific times; instead they indicate the changes the subject thought they had undergone in the last two years or would undergo in the next two years. For the convenience of comparison, the figures obtained from these two time scales were converted into the actual scores for their Past and Future self concepts, by subtracting the scores on the Past Scale from those on the Present Scale, and by adding the scores on the Future Scale to those on the Present Scale respectively. This makes some weak metric assumptions about the response scale properties.

Table 7-16 shows the mean scores and standard deviations of the Past, Present and Future self concepts in Korea and New Zealand samples. In both samples, the magnitude of SDs for the Past self concepts was found to be similar to that of the Present self concepts, which was smaller than that of the Future. It is also found that the SDs of the Korean sample in general were greater than those of the New Zealand sample.

Table 7-16 also reveals a clear trend of subjective

(TABLE 7-16) MEANS AND SDs OF PAST PRESENT AND FUTURE SELF CONCEPTS

ITEMS	KOREA				N.Z.			
	P A (S D)	P R (S D)	F U (S D)	SIG. LEVEL	P A (S D)	P R (S D)	F U (S D)	SIG. LEVEL
Active	0.18 (26.36)	9.69 (22.68)	29.99 (31.95)	***	13.05 (21.67)	17.26 (18.91)	26.87 (22.77)	***
Ambitious	5.67 (23.14)	18.93 (22.17)	41.16 (33.57)	***	8.72 (20.46)	14.31 (19.17)	24.64 (25.08)	***
Capable	3.67 (20.30)	12.98 (18.62)	33.44 (28.45)	***	6.03 (18.64)	17.08 (15.25)	30.17 (20.06)	***
Clean	4.99 (22.64)	17.19 (21.15)	35.03 (30.95)	***	11.10 (20.37)	16.07 (20.00)	22.73 (23.54)	***
Courageous	-2.08 (22.39)	6.22 (21.36)	24.33 (31.04)	***	0.75 (16.99)	4.10 (16.62)	8.37 (21.35)	***
Creative	3.33 (20.95)	10.75 (19.95)	27.50 (30.09)	***	5.21 (19.22)	9.95 (19.17)	17.27 (25.32)	***
Healthy	7.15 (24.40)	15.84 (24.50)	32.48 (35.62)	***	16.01 (21.03)	18.90 (20.11)	25.52 (22.55)	***
Honest	11.21 (22.80)	22.94 (21.02)	40.30 (31.77)	***	17.27 (20.26)	21.99 (18.43)	26.36 (21.58)	***
Intelligent	6.89 (21.63)	14.92 (18.41)	29.29 (27.90)	***	12.35 (18.46)	18.46 (15.30)	24.71 (19.63)	***
Optimistic	4.62 (25.15)	13.25 (23.68)	26.63 (33.91)	***	8.97 (18.79)	13.44 (19.69)	18.63 (25.26)	***
Patient	4.62 (25.52)	17.97 (23.29)	37.38 (32.82)	***	4.11 (21.22)	9.12 (20.96)	16.62 (24.44)	***
Pleasant	2.50 (24.79)	13.22 (22.23)	28.59 (31.41)	***	7.59 (18.39)	14.35 (17.21)	22.09 (21.22)	***
Rational	1.25 (21.23)	11.24 (20.84)	28.73 (30.44)	***	5.87 (18.11)	13.01 (17.87)	20.31 (21.76)	***
Religious	-6.86 (27.75)	-8.15 (30.00)	-0.34 (45.37)	***	-6.38 (24.38)	-5.46 (29.96)	-1.59 (40.24)	**
Self-Controlled	0.53 (21.97)	11.98 (21.81)	32.63 (30.51)	***	3.98 (20.91)	11.51 (19.53)	20.87 (23.04)	***
Leadership	-1.73 (23.41)	4.40 (22.30)	22.30 (32.37)	***	1.79 (19.23)	9.21 (19.70)	19.24 (25.22)	***
Considerate	5.87 (20.11)	20.31 (19.05)	42.06 (28.19)	***	7.72 (17.71)	17.16 (15.90)	26.53 (20.04)	***
Helpful	7.21 (21.27)	19.87 (19.02)	38.78 (28.54)	***	6.77 (16.91)	13.67 (16.39)	23.28 (22.28)	***
Independent	2.93 (21.88)	16.95 (21.60)	41.98 (31.80)	***	3.16 (21.34)	18.02 (19.25)	33.40 (26.73)	***
Loving	5.34 (21.10)	16.10 (20.39)	32.07 (30.84)	***	5.74 (18.10)	15.24 (18.95)	26.93 (26.49)	***
Obedient	7.08 (22.36)	13.87 (22.91)	23.90 (33.71)	***	6.75 (18.95)	5.83 (19.19)	8.45 (24.25)	*
Open-Minded	1.15 (20.04)	10.96 (20.45)	28.98 (30.30)	***	8.52 (18.64)	19.67 (17.89)	27.91 (23.91)	***

continued over

(TABLE 7-16) MEANS AND SDs OF PAST PRESENT AND FUTURE SELF CONCEPTS

ITEMS	KOREA				N.Z.			
	P A (S D)	P R (S D)	F U (S D)	SIG. LEVEL	P A (S D)	P R (S D)	F U (S D)	SIG. LEVEL
Pliable	1.82 (20.30)	13.19 (20.71)	32.86 (29.81)	***	6.53 (19.16)	12.68 (17.97)	19.61 (23.59)	***
Polite	8.44 (20.73)	20.56 (18.24)	38.39 (28.40)	***	13.73 (18.33)	16.00 (17.45)	20.48 (21.51)	***
Popular	2.04 (19.40)	8.28 (19.76)	20.83 (30.45)	***	2.77 (16.37)	9.30 (16.50)	14.46 (20.91)	***
Progressive	0.91 (21.57)	9.74 (19.99)	27.43 (30.86)	***	4.39 (15.89)	10.81 (15.46)	19.84 (21.86)	***
Responsible	8.92 (21.39)	23.20 (18.45)	45.21 (29.48)	***	9.84 (17.76)	18.98 (16.67)	30.97 (22.38)	***
Self-Revealing	-1.51 (22.50)	5.73 (23.96)	22.53 (33.66)	***	-2.80 (20.93)	2.50 (21.52)	6.65 (25.45)	***
Sociable	-0.49 (22.61)	7.00 (22.95)	23.00 (33.83)	***	2.50 (19.27)	12.18 (20.07)	22.82 (26.49)	***
Successful	3.41 (22.65)	14.29 (21.57)	33.69 (33.73)	***	1.65 (16.75)	6.77 (16.45)	17.16 (23.63)	***

KOREA N=939, N.Z. N=943, * P < .05, ** P < .01, ***P < .001

changes (directionality) in all the self attributes (except Religious in the Korean sample and Obedient in the New Zealand sample) along the continuum of time : the mean scores on the Future Scale were higher than those on the Present Scale, which in turn were higher than those on the Past Scale. To test the statistical significance of the differences among these three time scales, a MANOVA was performed for each sample, the results of which were summarized in Tables 7-17 and 7-18.

(TABLE 7-17) THE RESULTS OF THE MANOVA FOR PAST, PRESENT AND FUTURE SELF AND CANONICAL CORRELATION (R) - KOREA

TEST OF ROOTS	F	DFHYP	DFERR	P VALUE	R	REF. FOR UNIVARIATE F
1 through 1	39.769	60.00	5570.00	P < .001	.710	Appendix 13
2 through 2	1.108	29.00	2785.50	.316	.107	

(TABLE 7-18) THE RESULTS OF THE MANOVA FOR PAST, PRESENT AND FUTURE SELF
AND CANONICAL CORRELATION (R) - N.Z.

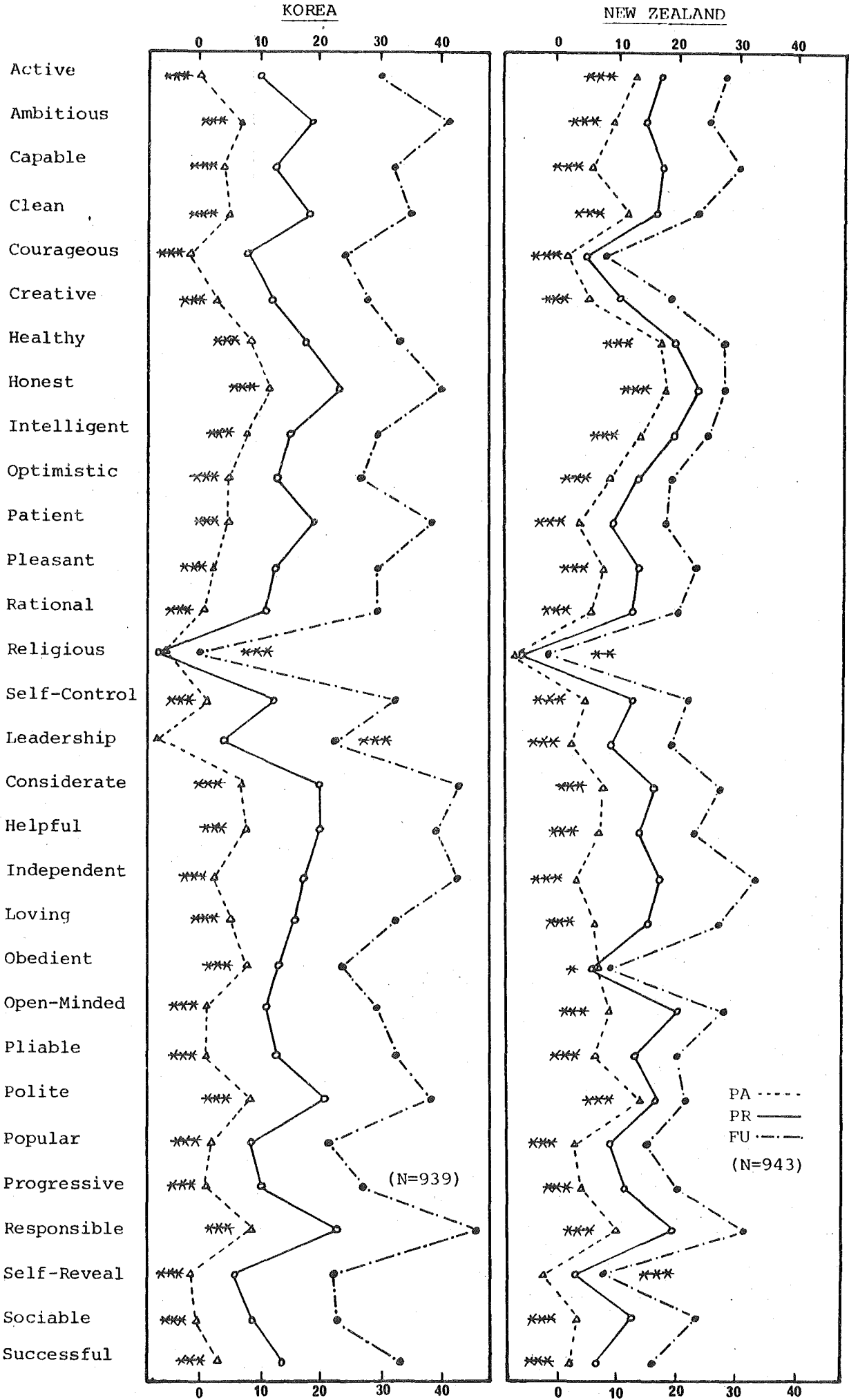
TEST OF ROOTS	F	DFHYP	DFERR	P VALUE	R	REF. FOR UNIVARIATE F
1 through 1	27.940	60.00	5594.00	$P < .001$.630	Appendix 14
2 through 2	1.886	28.00	2797.50	.003	.138	

As can be readily seen in the above tables the system in the Korean sample was one dimensional, but the system in the New Zealand sample was two dimensional. In both samples, the Wilks Lambda P values were highly significant ($P < .001$ and $P < .003$ for the New Zealand sample, and $P < .001$ for the Korean sample). From this evidence it can be stated that there were definite differences between the three time scales in both cultures and they were probably more complicated in New Zealand than in Korea. An inspection of the univariate F tests (see Appendix 13 for the Korean sample, and Appendix 14 for the New Zealand sample) showed that all thirty items were found to contribute to the statistical significance in both samples. The significance levels of the thirty items have been reported in Table 7-16 and in Figure 7-8.

A close examination of Table 7-16 and Figure 7-8 reveals that:

- 1) Both Korean and New Zealand young adults showed significant differences on all of the thirty items between the three time scales (Past, Present and Future self concepts). For the Korean sample, the significance was at the .001 level for all items. The .001 level of significance was also true for the New Zealand sample on all items except Religious

(FIGURE 7-8) COMPARISON OF PAST, PRESENT AND FUTURE SELF CONCEPTS



($P < .01$) and Obedient ($P < .05$).

2) A similar pattern of increasing positiveness in self concepts along the time continuum could be detected in both cultures. All items showed the highest scores on the Future Scale (FU), the second highest on the Present Scale (PR), and the lowest on the Past Scale (PA), thus revealing a pattern of $PA < PR < FU$. The only exceptions - Religious for the Korean sample and Obedient for the New Zealand sample - however, showed a different pattern : $PR < PA < FU$.

3) In both Korean and New Zealand samples, the magnitude of changes was greater between the Present and Future self concepts than between the Present and Past self concepts, thus indicating a pattern of $\text{Diff (PR-PA)} < \text{Diff (FU-PR)}$. This was true of all the thirty items in the Korean sample, but in the New Zealand sample, four of the thirty items (Considerate, Independent, Open-minded, Popular) came up with a different pattern - $\text{Diff (PR-PA)} > \text{Diff (FU-PR)}$.

It is regrettable that there are no empirical studies on this dimension of self concept in the literature with which we may compare the present findings. However, our results seem to be compatible with the notion of future orientation as an essential criterion for purposeful and goal-directed behaviour, as expounded and proved by many theoretical and empirical studies in relation to the field of temporal orientation (Allport, 1961; Kastenbaum, 1961; Fraisse, 1963; Sattler, 1964; Blatt and Quinlan, 1967; Frankl, 1972).

In general, hypothesis 8 which postulated the pattern of increasing positiveness in the self concepts of young adults in both cultures along the time continuum (from the past through the present to the future) is supported by the findings on all

items except Religious (in Korea) and Obedient (in New Zealand). A comparison of the scores on these two items by the Korean and New Zealand young adults seems to result in the following observations.

First of all, let us examine the patterns of change in both samples with regard to Religious. On the surface, Korea and New Zealand seem to follow different patterns, i.e., $PR < PA < FU$ and $PA < PR < FU$ respectively. However, it was found that the difference ($PA - PR$) in both cultures was negligible. Moreover, the item was found to be a negative attribute on all three time scales in both cultures, although it showed a significant increase in a positive direction on the Future scale. Hence, it may be concluded that in fact the two cultures are not very different from each other in this aspect. Another interesting point is that the magnitude of increase in this item on the Future scale for both cultures was smaller than most items in both cases. This may be explained by the general secular tendency in modern society as discussed in Section I(ii) of this chapter.

Secondly, we may compare the patterns of change in Korea and New Zealand as shown in their scores on Obedient. Like most of the items in the questionnaire, Obedient also revealed the pattern of $PA < PR < FU$, with a highest score on the Future scale for the Korean sample. However, in New Zealand, the pattern is $PR < PA < FU$ and the difference between the Past and Present scales was negligible ($\text{diff.} = .88$), although it showed a tendency towards a more positive self concept on the Future scale. The significance level for the differences of mean scores of the three time scales ($P < .05$) was also found to be lower than that of all the other items ($P < .001$ for 28 items).

and $P < .01$ for 1 item). This phenomenon may be interpreted as direct results of cultural reinforcement in both societies (see Chapter 4).

On the whole, the pattern of increasing positive changes traced in the present study shows that young adults in both cultures anticipated more positive changes in their self concepts in the next two years (Future) than they had experienced in the last two years (Past). This may be explained by the theoretical expositions of Kastenbaum (1961) and Fraisse (1963) on temporal direction of our behaviour : at any given moment, a normal person's time perspective can be characterized as directed more towards the future than towards the past, and also supported by the empirical studies of Lee (1974) and Mezei (1974) who demonstrated a marked preference for future orientation as against past orientation among people.

A close look at Table 7-16 and Figure 7-8 also reveals that such a phenomenon was more distinctive among Korean young adults than among New Zealand young adults. Among Korean young adults, all of the 30 items clearly showed more changes in future than in the past, while among New Zealand young adults 26 items showed more changes in the future and 4 items in the past. Moreover, of the 26 items 9 items were found to have similar magnitude of change both in the past and in future, although they showed slightly more in the latter. Therefore it can be concluded that our findings have fulfilled the prediction in Hypothesis 8 concerning the cross-cultural comparison : the future oriented pattern of subjective change in self concepts is more distinctive among Korean young adults than among New Zealand young adults.

Another interesting point is found when the differences

in change along the time continuum in the two cultures are compared. Korean young adults in general showed more changes than New Zealand young adults not only in the past (KOR (PR-PA) > NZ (PR-PA)) but also in future (KOR (FU-PR) > NZ (FU-PR)).

As discussed earlier (see Section V of Chapter 2), high achievement motivation is closely associated with the sense of moving forward into the future (Teahan, 1958; Knapp and Garbutt, 1958; Green and Knapp, 1959; Kastenbaum, 1961; McClelland, 1961). Insofar as positive self concept is often equated with high achievement motivation (e.g., Piers and Harris, 1964; Shaw and Alves, 1963), it seems reasonable to postulate that young adults with higher achievement motivation in general anticipate more increase in positive self attributes than those with lower achievement motivation. If examined in this light, the relatively more positive changes shown by the Korean samples may be interpreted as a consequence of their high achievement motivation, which in turn is the result of the special environment in their society. In the family circle, the Korean young adult is more closely related to the other members; hence he tends to live up to the expectations his family has of him, while the New Zealand young adult is more independent and has few demands or expectations from his family. The competitiveness in the Korean educational system, which is an acute contrast to the New Zealand scene (at least up to the present) (see Chapter 4) also contribute to their different levels of achievement motivation. The general atmosphere in a society in transition, such as in Korea, also generates a high sense of motivation than a stable society like New Zealand. Finally another factor for this phenomenon may be in the nature of the Korean sample — most of the subjects

under study are apparently the most successful young adults in their society, since they have survived many selection exams and gained entry into one of the best schools or universities in Korea (see Chapter 4).

In summary, both Korean and New Zealand young adults showed a similar pattern in subjective change in their self concept from the past through the present to the future :

1) increasing positiveness in their self concepts along the time dimension ($PA < PR < FU$) and 2) more change in the next two years than in the last two years ($\text{Diff } (PR-PA) < \text{Diff } (FU-PR)$).

It was also found that this pattern of subjective change is more distinctive among Korean young adults than among New Zealand young adults. Therefore, it can be concluded that Hypothesis 8 is strongly supported by our findings.

CHAPTER EIGHT

RESULTS AND DISCUSSION (II) : FACTOR ANALYSES

Despite the many remarkable differences in the cultural backgrounds of the Korean and New Zealand subjects, it is expected that the overall similarity in factor structure would dominate the differences, since invariance is one of the common assumptions of factor analysis. Hence, although it is not an essential part of the present study, this chapter is devoted to examine whether there exist any common characteristics in the factor structure of the self concepts which hold between Korean and New Zealand young adults.

Some support for the expectation of similarity in factor structure in cross-cultural judgments comes from the empirical study of moral values by Rettig and Pasamanick (1962), in which very similar factor structures of moral values across two very different cultures (Korea and the United States) were discovered. Moreover, this expectation is also encouraged by the notion of "psychic unity" — the absence of fundamental differences in thought process among different human races (Cole, Gay, Glick and Sharp, 1971). Therefore, it was hypothesized that Korean and New Zealand young adults would show similar factors in the factor structure of their Actual Self Concept (Hypothesis 9) as well as their Ideal Self Concept (Hypothesis 10). In order to test these hypotheses, thirty adjective ratings from each of the Present (Actual) and Ideal Self Concept Scales were factor analyzed according to sex, religious backgrounds, educational level and social class. Thus for each culture factor analyses of the two scales were

performed for the following groups:

- 1) High school males (HS-M),
- 2) High school females (HS-F),
- 3) Junior university males (JU-M),
- 4) Junior university females (JU-F),
- 5) Senior university males (SU-M),
- 6) Senior university females (SU-F),
- 7) High school Christians (HS-XN),
- 8) High school Non-believers (HS-NB),
- 9) Junior university Christians (JU-XN),
- 10) Junior university Non-believers (JU-NB),
- 11) Senior university Christians (SU-XN),
- 12) Senior university Non-believers (SU-NB),
- 13) High school higher SES males (High-M),
- 14) High school higher SES females (High-F),
- 15) High school lower SES males (Low-M) and
- 16) High school lower class females (Low-F).

As noted earlier, the high school groups were not included in the analyses for ideal self concepts. Thus, altogether 48 sets of 30 x 30 intercorrelation matrices (Pearson product moment r) were obtained. These intercorrelation matrices were individually factor analyzed using the Principal Components Analysis programme in the IBM SSR package modified by Professor Gregson to run on the Burroughs 6718.

For the analyses, an Eigenvalue of .90 was used to terminate factor extraction. The application of this criterion to the data of this study produced in each analysis an extraction of 5 to 10 factors. Table 8-1 shows the number of factors resulting from each analysis. The extracted factors were then rotated orthogonally using the varimax method as programmed in

the IBM SSR package. A series of Appendices 15 and 16 show the rotated factor loadings for each of the 48 analyses.

(TABLE 8-1.) THE NUMBER OF EXTRACTED FACTORS IN EACH ANALYSIS

GROUP	ACTUAL SELF		IDEAL SELF	
	KOREA	N.Z.	KOREA	N.Z.
HS-M	10 (195)*	9 (205)		
HS-F	9 (154)	9 (158)		
JU-M	9 (208)	9 (225)	6 (208)	6 (225)
JU-F	8 (93)	10 (103)	5 (93)	8 (103)
SU-M	10 (196)	8 (186)	6 (196)	7 (186)
SU-F	9 (93)	9 (66)	6 (93)	7 (66)
HS-XN	10 (144)	9 (267)		
HS-NB	10 (172)	10 (96)		
JU-XN	9 (59)	9 (201)	7 (59)	7 (201)
JU-NB	8 (201)	10 (127)	6 (201)	7 (127)
SU-XN	10 (66)	9 (140)	9 (66)	7 (140)
SU-NB	9 (195)	9 (112)	5 (195)	9 (112)
High-M	9 (98)	9 (121)		
High-F	9 (79)	10 (109)		
Low -M	10 (97)	8 (84)		
Low -F	10 (75)	10 (49)		

*Figures in the brackets indicate the size of N.

In interpreting the rotated factors, only those variables with a loading of at least .40 were included. However, in several cases loadings as low as .30 were used, since there were no variables with a loading of .40 or above in the factors.

Because of the large number of factor analyses performed (48 analyses) and the large number of factors extracted (404 factors), a classificatory scheme similar to that of Finch (1973) was adopted to give order to the interpretations and to facilitate comprehension. Besides, as it has also been pointed out by Ray (1973), the principal components analysis does not normally produce clear-cut factor structure

when it is used as an exploratory tool (as in the present study). Therefore, such a classificatory scheme was necessary in the present study.

This scheme of classification includes:

- 1) Named Factors - the psychological meanings are readily discernible and suitable names could be assigned to them;
- 2) Unnamed Factors - the psychological meanings seem to be there, but suitable names can not be found for them;
- 3) Complex Factors - they are so complex that psychological meanings are not discernible;
- 4) No Relationship Factors - no relationships can be found among the variables;
- 5) Bipolar Factors - there are positive as well as negative factor loadings, and they do not appear to have any clear psychological meanings; the interpretable Bipolar Factors, however, are included in the Named Factors;
- 6) One Variable Factors - in each factor there is only one variable with a high loading.

Accordingly, all factors emerged in the 48 analyses were classified and the order of extraction of these factors was signified by the Roman numerals employed for the purpose of easy comparison, as shown in Table 8-2 for actual self concept and Table 8-3 for ideal self concept.

(TABLE 8-2) CLASSIFICATION OF FACTORS EMERGED IN ACTUAL SELF CONCEPTS

GROUP	NAMED F.	UNNAMED F.	COMPLEX F.	NO-R.* F.	BIPOLAR F.	ONE VAR.** F
HS-M (KOR) (N.Z.)	IV V VI VII X I III VI IX	IV		VII VIII	VIII IV V	I II III II
HS-F (KOR) (N.Z.)	IV VI VII I III V VI VII VIII	IX		II III VIII II	I V IX IV	
JU-M (KOR) (N.Z.)	VII IX I II IV V VI VII VIII IX	V III	IV VIII		I II III	VI
JU-F (KOR) (N.Z.)	VII VIII IX I II V VII VIII IX	I IV	IV	VI	II III V VI III X	
SU-M (KOR) (N.Z.)	I IV X I II III IV V VII	III V VIII	IX	VII VIII	II VI VI	
SU-F (KOR) (N.Z.)	III IV VI VII I III IV	VIII II V VII		VIII IX	I II V IX VI	
HS-XN (KOR) (N.Z.)	IV VII IX II VI	II VIII X IX		III V VI	I I III IV VI VIII	VI
HS-NB (KOR) (N.Z.)	II III VII IX II IV V VII X		X	IV VIII I IX	V VI III VIII	I VI
JU-XN (KOR) (N.Z.)	II IV VIII I II III V IX	VII	III V	I VI VIII	VII IX IV	VI
JU-NB (KOR) (N.Z.)	III V II III IV V VII IX	IV	VI I	VIII	I II VII VI VII	X
SU-XN (KOR) (N.Z.)	II VI X I II IV VI	III IX	IX V	V	I IV VII VIII VII VIII	III
SU-NB (KOR) (N.Z.)	II V VIII IX I II III IV V VIII	IV	III	VI	I V VI VII	IX
High-M(KOR) (N.Z.)	II V I II IV VI VIII IX	IX III	VI VIII		I III IV VII V VII	
High-F(KOR) (N.Z.)	III V VII IX I II III IV V VI VII VIII IX X	I II	IV	VIII	VI	
Low-M(KOR) (N.Z.)	I II V VII VIII X I III IV VI VII VIII	III	IX		IV VI V	III
Low-F(KOR) (N.Z.)	II VIII I II IV VIII IX X		IV	X VI VII	I III V VI VII IX III V	

* No-Relation Factor ** One Variable Factor

(TABLE 8-3) CLASSIFICATION OF FACTORS EMERGED IN IDEAL SELF CONCEPTS

GROUP	NAMED F.	UNNAMED F.	COMPLEX F.	NO-R. F.	BIPOLAR F.	ONE VAR. F.
JU-M (KOR (N.Z.))	III I II III V	IV	V VI	IV	I II	VI
JU-F (KOR (N.Z.))	II IV V II III IV V	I VI VIII	I III		VII	
SU-M (KOR (N.Z.))	III IV V I II III IV V	VII	VI	VI	I II	
SU-F (KOR (N.Z.))	V I II IV V VI VII		II VI	I III	III IV	
JU-XN (KOR (N.Z.))	II V III IV V VI	III VII	III VII I	I VI	IV	VI
JU-NB (KOR (N.Z.))	III II III IV VI		I V I	VII	II IV V	
SU-XN (KOR (N.Z.))	III VI VII I II III IV V VI	I	II	V VII VIII VII	IV	
SU-NB (KOR (N.Z.))	I III I II III V VI		II V	IV IV IX	VII	VIII

In the following descriptions of the Named Factors, the scale items were listed in the order of the magnitude of their factor loadings: from higher to lower loadings. It has to be pointed out, too, that several factors not composed of identical items were given the same name. However, in the cases of several Named Factors, similarity of factors were not considered to be great enough to give them identical names, but similar names were selected. In the case of Bipolar Factors, the scale items which have negative loadings were indicated with the symbol of (-).

I. DESCRIPTIONS OF NAMED FACTORS IN ACTUAL SELF CONCEPT

I(i). NAMED FACTORS OF MALES AND FEMALES

High School Level

The analysis for the HS-M (KOR) resulted in the extraction of 10 factors, accounting for 66.4% of the total variance. Five of the

factors were given names:

- IV. Social Competence - Optimistic, Pleasant, Progressive, Successful, Pliable, Sociable, Active, Self-revealing, Ambitious, Independent.
- V. Sociability - Loving, Obedient, Polite, Popular, Sociable, Pleasant, Open-minded.
- VI. Personal Integrity - Honest, Considerate, Intelligent, Responsible, Polite.
- VII. Creativity - Creative, Ambitious, Capable.
- X. Leadership - Courageous, Leadership.

Nine factors, accounting for 65.3% of the total variance, were extracted in the analysis for the HS-M (NZ). The following four factors were named:

- I. Physical Adequacy - Active, Healthy.
- III. Competence and Sociability - Capable, Successful, Popular, Rational, Progressive, Responsible, Intelligent, Optimistic, Ambitious, Clean, Pleasant, Sociable, Leadership, Open-minded, Loving.
- VI. Independence - Independent, Ambitious.
- IX. Social Morality - Honest, Helpful, Obedient, Clean, Self-controlled, Polite, Considerate.

The analysis for the HS-F (KOR) resulted in the extraction of 9 factors, accounting for 64% of the total variance. Three of the factors were named:

- IV. Sociability - Loving, Sociable, Considerate, Pliable, Leadership, Active, Self-revealing.
- VI. Extraversion - Courageous, Healthy, Ambitious, Active, Optimistic.
- VII. Sociability and Morality - Pleasant, Pliable, Polite, Clean, Popular, Loving, Open-minded, Sociable,

Progressive, Obedient.

The analysis for the HS-F (NZ) resulted in the extraction of nine factors accounting for 65.7% of the total variance.

Six of the factors were named:

- I. Sociability - Optimistic, Sociable, Loving, Pleasant, Popular, Pliable, Open-minded.
- III. Social Competence - Popular, Loving, Successful, Sociable, Leadership, Pleasant.
- V. Physical Adequacy - Active, Healthy and Self-revealing (-).
- VI. Creativity - Creative, Ambitious, Successful.
- VII. Adaptability - Polite, Open-minded, Pliable, Considerate.
- VIII. Social Morality - Courageous, Considerate, Patient, Helpful, Self-controlled, Obedient, Honest, Religious.

Junior University Level

The analysis for the JU-M (KOR) resulted in the extraction of nine factors, accounting for 65.1% of the total variance.

Two of the factors were given names:

- VII. Extraversion - Courageous, Active, Capable, Ambitious, Creative, Independent.
- IX. Optimism - Optimistic, Pleasant and Pliable.

The analysis for the JU-M (NZ) resulted in the extraction of nine factors, accounting for 66.2% of the total variance.

Eight of the factors were given names:

- I. Sociability - Sociable, Popular, Self-revealing, Pleasant, Loving, Optimistic.
- II. Consideration - Considerate, Helpful, Responsible, Honest, Loving.

- IV. Achievement and Competence - Ambitious, Progressive, Leadership, Capable, Independent, Active, Responsible, Successful.
- V. Physical Adequacy - Healthy, Active.
- VI. Social Gracefulness - Clean, Obedient, Polite.
- VII. Intellectual Competence - Intelligent, Successful, Rational, Self-controlled.
- VIII. Open-mindedness - Pliable, Open-minded, Independent.
- IX. Self-discipline - Patient, Optimistic, Self-controlled, Pleasant.

The analysis for the JU-F (KOR) resulted in the extraction of nine factors accounting for 72.8% of the total variance. Three of the factors were named:

- VII. Social Competence - Leadership, Open-minded, Considerate, Successful, Pliable, Progressive, Helpful, Responsible, Self-revealing, Rational, Sociable, Courageous.
- VIII. Social Morality - Patient, Obedient, Loving, Polite, Popular, Helpful, Open-minded.
- IX. Amiability - Clean, Loving, Self-revealing, Pleasant.

The analysis for the JU-F (NZ) resulted in the extraction of ten factors accounting for 72.2% of the total variance. Six of the factors were given names:

- I. Social Morality - Pleasant, Loving, Helpful, Considerate, Responsible, Obedient, Polite, Honest, Open-minded, Pliable.
- II. Self-discipline - Self-controlled, Patient, Obedient.
- V. Intellectual Competence - Intelligent, Ambitious, Successful.

VII. Social Competence - Popular, Progressive, Sociable, Successful.

VIII. Self-reliance - Independent, Open-minded, Pliable and Religious (-).

IX. Physical Adequacy - Active, Healthy.

Senior University Level

The analysis for the SU-M (KOR) resulted in the extraction of ten factors accounting for 67.4% of the total variance.

Three of the factors were named:

I. Social Competence - Sociable, Successful, Helpful, Pliable, Self-revealing.

IV. Progressiveness - Progressive, Independent.

X. Leadership - Leadership, Capable, ambitious, Responsible.

The analysis for the SU-M (NZ) resulted in the extraction of eight factors accounting for 63.4% of the total variance.

Six of the factors were named:

I. Achievement and Competence - Ambitious, Successful, Courageous, Capable, Leadership, Responsible, Active, Clean, Progressive.

II. Social Morality - Obedient, Considerate, Polite, Honest, Helpful, Responsible, Religious, Self-controlled.

III. Sociability - Popular, Sociable, Pleasant, Loving, Self-revealing.

IV. Open-mindedness - Open-minded, Pliable, Independent, Progressive.

V. Intellectual Competence - Rational, Intelligent, Capable.

VII. Physical Adequacy - Healthy, Active.

The analysis for the SU-F (KOR) resulted in the extraction of nine factors accounting for 68.8% of the total variance. Four of the factors were given names:

- III. Sociability - Self-revealing, Sociable, Popular, and Ambitious (-).
- IV. Achievement and Competence - Capable, Pliable, Creative, Successful, Intelligent, Optimistic, Progressive, Courageous.
- VI. Social Morality - Obedient, Polite, Helpful, Patient, Clean, Considerate, Self-controlled, Open-minded and Active (-).
- VII. Intellectual Competence - Rational, Intelligent, Responsible.

The analysis for the SU-F (NZ) resulted in the extraction of nine factors accounting for 74.4% of the total variance. Three of the factors were given names:

- I. Social Competence - Sociable, Progressive, Leadership, Helpful, Loving, Considerate.
- III. Cheerfulness - Healthy, Optimistic, Pleasant.
- IV. Religiosity - Religious, Self-controlled.

I(ii). NAMED FACTORS OF CHRISTIANS AND NON-BELIEVERS (ACTUAL SELF)

High School Level

The analysis for the HS-XN (KOR) resulted in the extraction of ten factors accounting for 72.9% of the total variance. Three of the factors were given names:

- IV. Consideration - Considerate, Polite, Open-minded, Loving.
- VII. Social-Competence - Self-revealing, Leadership, Popular, Independent, Sociable, Progressive, Pliable,

Ambitious, Honest.

- IX. Cheerfulness - Pleasant, Optimistic, Helpful,
Healthy, Responsible.

The analysis for the HS-XN (NZ) resulted in the extraction of nine factors accounting for 64.2% of the total variance. Two of the factors were given names:

- II. Compliance - Patient, Optimistic, Obedient.
VII. Morality and Competence - Helpful, Considerate,
Self-controlled, Honest, Responsible, Obedient,
Progressive, Successful, Patient, Intelligent,
Rational, Polite, Religious, Capable.

The analysis for the HS-NB (KOR) resulted in the extraction of ten factors accounting for 66.8% of the total variance. Four of the factors were named:

- II. Initiative - Healthy, Leadership, Ambitious.
III. Social Morality - Helpful, Honest, Healthy,
Obedient, Polite, Self-controlled, Clean and Self-revealing (-).
VII. Social Competence - Optimistic, Successful,
Pleasant, Intelligent, Sociable, Self-revealing.
IX. Sociability - Popular, Pliable, Loving, Considerate,
Honest.

The analysis for the HS-NB (NZ) resulted in the extraction of ten factors accounting for 72.9% of the total variance. Five of the factors were given names:

- II. Physical Adequacy - Courageous, Healthy, Active.
IV. Religiosity - Obedient, Religious, Healthy.
V. Creativity - Creative, Self-revealing.
VII. Achievement and Competence - Intelligent, Capable,
Successful, Rational, Leadership, Responsible,

Honest, Patient, Ambitious, Creative.

- X. Morality and Sociability - Clean, Sociable, Loving, Popular, Honest, Capable, Polite, Self-controlled, Ambitious, Optimistic.

Junior University Level

The analysis for the JU-XN (KOR) resulted in the extraction of nine factors accounting for 75.7% of the total variance.

Three of the factors were given names:

- II. Physical Adequacy - Healthy, Active and Optimistic (-).
- IV. Compliance - Obedient, Religious, Popular, Patient.
- VIII. Social Competence - Pleasant, Sociable, Courageous, Leadership, Pliable, Successful, Open-minded, Honest, Progressive, Considerate, Active, Polite, Popular, Self-revealing, Optimistic.

The analysis for the JU-XN (NZ) resulted in the extraction of nine factors accounting for 65.3% of the total variance.

Five of the factors were named:

- I. Sociability - Sociable, Self-revealing, Popular, Successful, Pleasant.
- II. Self-discipline - Patient, Obedient, Optimistic, Self-controlled, Religious.
- III. Initiative - Ambitious, Progressive, Leadership, Independent, Capable.
- V. Consideration - Considerate, Helpful, Pliable, Responsible, Loving, Honest.
- IX. Physical Adequacy - Active, Healthy, Leadership.

The analysis for the JU-NB (KOR) resulted in the extraction of eight factors accounting for 63.6% of the total variance.

Two of them were given names:

III. Amiability - Loving, Polite.

V. Intellectual Competence and Sociability - Capable, Intelligent, Self-revealing, Sociable, Progressive, Rational, Clean, Popular.

The analysis for the JU-NB (NZ) resulted in the extraction of ten factors accounting for 70.4% of the total variance. Six of the factors were named:

II. Achievement - Successful, Ambitious, Progressive, Rational.

III. Sociability - Helpful, Sociable, Loving, Pleasant, Optimistic, Popular, Considerate.

IV. Self-discipline - Patient, Self-controlled, Rational, Capable.

V. Courage - Courageous, Creative, Leadership.

VII. Politeness - Polite, Obedient.

IX. Physical Adequacy - Active, Healthy.

Senior University Level

The analysis for the SU-XN (KOR) resulted in the extraction of ten factors accounting for 76.7% of the total variance. Three of the factors were given names:

II. Leadership - Leadership, Independent, Responsible.

VI. Social Morality - Obedient, Polite, Patient, Considerate, Responsible and Sociable (-).

X. Religiosity - Loving, Religious.

The analysis for the SU-XN (NZ) resulted in the extraction of nine factors accounting for 68.5% of the total variance. Four of the factors were named:

I. Sociability - Leadership, Sociable, Courageous, Self-revealing, Loving, Progressive, Popular, Optimistic.

- II. Social Morality - Considerate, Helpful, Honest, Obedient, Loving, Polite.
- IV. Intellectual Competence - Rational, Capable, Intelligent, Responsible.
- VI. Religiosity - Religious, Patient, Self-controlled, Optimistic.

The analysis for the SU-NB (KOR) resulted in the extraction of nine factors accounting for 65% of the total variance.

Four of the factors were named:

- II. Courage - Courageous, Healthy, Ambitious.
- V. Extraversion - Active, Leadership, Ambitious, Loving, Sociable, Pleasant.
- VIII. Sociability - Clean, Optimistic, Popular, Pleasant, Sociable, Loving, Open-minded.
- IX. Intellectual Ability - Intelligent, Capable.

The analysis for the SU-NB (NZ) resulted in the extraction of nine factors accounting for 68% of the total variance.

Six of the factors were named:

- I. Intellectual Competence - Intelligent, Capable, Rational, Successful, Leadership.
- II. Social Morality - Polite, Obedient, Responsible, Honest, Self-controlled, Considerate.
- III. Extraversion - Courage, Ambitious, Active, Clean, Independent.
- IV. Sociability - Sociable, Popular, Self-revealing, Pleasant, Loving, Leadership.
- V. Cheerfulness - Healthy, Optimistic, Pleasant, Active, Independent.
- VIII. Open-mindedness - Open-minded, Pliable, Considerate, Helpful.

I(III). NAMED FACTORS OF HIGH AND LOW SES GROUPS (HIGH SCHOOL STUDENTS - ACTUAL SELF)

The analysis for the High-M (KOR) resulted in the extraction of nine factors accounting for 69.3% of the total variance.

Two of the factors were given names:

- II. Social Morality - Self-controlled, Obedient, Rational, Loving, Polite.
- V. Sociability - Self-revealing, Sociable, Popular.

The analysis for the High-M (NZ) resulted in the extraction of nine factors accounting for 66.7% of the total variance.

Six of the factors were named:

- I. Social Morality - Polite, Clean, Considerate, Helpful, Honest, Obedient, Self-controlled, Responsible.
- II. Social Activeness - Healthy, Active, Pliable, Sociable.
- IV. Intellectual Ability - Intelligent, Capable, Rational.
- VI. Religiosity - Religious, Ambitious, Patient.
- VIII. Independence - Independent, Open-minded.
- IX. Sociability - Loving, Sociable, Optimistic, Pleasant.

The analysis for the High-F (KOR) resulted in the extraction of nine factors accounting for 70.8% of the total variance.

Four of the factors were given names:

- III. Morality and Sociability - Polite, Clean, Popular, Open-minded, Self-controlled, Loving, Intelligent, Optimistic, Patient, Responsible.
- V. Intellectual Ability - Capable, Creative, Intelligent.
- VII. Initiative - Active, Leadership.

IX. Compliance - Obedient, Helpful, Patient.

The analysis for the High-F (NZ) resulted in the extraction of ten factors accounting for 73% of the total variance.

All of the factors were named.

- I. Competence and Achievement - Intelligent, Leadership, Successful, Progressive, Rational.
- II. Self-discipline - Self-controlled, Rational, Patient, Honest.
- III. Open-mindedness - Pliable, Open-minded, Optimistic.
- IV. Sociability - Sociable, Loving, Popular, Self-revealing, Considerate, Pleasant, Helpful.
- V. Ambitiousness - Ambitious, Progressive.
- VI. Creativity - Creative, Courageous.
- VII. Physical Adequacy - Active, Healthy, Courageous.
- VIII. Social Morality - Clean, Responsible, Polite, Capable, Honest, Obedient.
- IX. Independence - Independent, Self-revealing.
- X. Religiosity - Religious, Optimistic, Honest.

The analysis for the Low-M (KOR) resulted in the extraction of ten factors accounting for 69.2% of the total variance.

Six of the factors were given names:

- I. Social Competence - Polite, Intelligent, Leadership, Pleasant, Healthy, Considerate, Popular.
- II. Compliance - Helpful, Obedient.
- V. Physical Adequacy - Healthy, Active.
- VII. Achievement and Competence - Successful, Progressive, Creative, Pliable, Intelligent, Ambitious.
- VIII. Religiosity - Religious, Self-controlled, Patient, Pleasant, Optimistic, Progressive.
- X. Honesty - Honest, Self-controlled, Obedient.

The analysis for the Low-M (NZ) resulted in the extraction of eight factors accounting for 69.7% of the total variance. Six of the factors were named:

- I. Achievement and Competence - Ambitious, Successful, Rational, Capable, Creative, Intelligent, Open-minded, Progressive, Leadership.
- II. Social Morality - Polite, Patient, Obedient, Pliable, Considerate, Helpful, Pleasant, Honest, Self-controlled, Intelligent.
- IV. Sociability - Sociable, Loving, Popular.
- VI. Independence - Independent, Open-minded, Self-controlled.
- VII. Physical Adequacy - Healthy, Active, Popular.
- VIII. Initiative - Courageous, Leadership, Responsible.

The analysis for the Low-F (KOR) resulted in the extraction of ten factors accounting for 72% of the total variance. Two of the factors were given names:

- II. Social Competence - Creative, Sociable, Leadership, Loving, Courageous and Patient (-).
- VIII. Initiative - Leadership, Ambitious.

The analysis for the Low-F (NZ) resulted in the extraction of ten factors accounting for 77.7% of the total variance. Six of the factors were given names.

- I. Sociability - Popular, Sociable, Loving, Pleasant, Healthy, Optimistic.
- II. Intellectual Competence - Intelligent, Capable, Ambitious, Successful.
- IV. Open-mindedness - Pliable, Open-minded.
- VIII. Self-discipline - Self-controlled, Obedient, Polite, Religious.

IX. Initiative - Courageous, Leadership, Successful.

X. Self-Reliance - Independent, Active, Healthy.

II. DESCRIPTION OF THE NAMED FACTORS IN IDEAL SELF CONCEPT

II(i). NAMED FACTORS OF MALES AND FEMALES (IDEAL SELF)

Senior University Level.

The analysis for the JU-M (KOR) resulted in the extraction of six factors accounting for 63.8% of the total variance.

One of the factors were given names:

III. Open-mindedness - Open-minded, Independent,
Pliable and Religious (-).

The analysis for the JU-M (NZ) resulted in the extraction of six factors accounting for 61.8% of the total variance.

Four of the factors were given names:

I. Social Morality - Considerate, Honest, Patient,
Helpful, Pleasant, Loving, Responsible, Self-
controlled, Rational, Capable, Polite, Healthy.

II. Achievement and Competence - Successful, Ambitious
Intelligent, Capable, Courageous, Active, Clean,
Progressive, Polite, Healthy, Independent.

III. Religiosity - Religious, Obedient.

V. Sociability - Popular, Sociable, Self-revealing,
Pleasant, Optimistic, Successful.

The analysis for the JU-F (KOR) resulted in the extraction of five factors accounting for 68.7% of the total variance.

Three of the factors were given names:

II. Social Competence - Self-revealing, Active, Leadership, Sociable, Progressive, Popular, Courageous,
Capable.

IV. Achievement and Competence - Creative, Independent,

Capable, Successful, Healthy, Intelligent,
Progressive, Honest, Patient, Ambitious,
Optimistic and Religious (-).

- V. Morality and Sociability - Obedient, Religious,
Open-minded, Pleasant, Loving, Pliable, Optimistic,
Patient, Polite, Helpful, Sociable, Successful,
Popular, Responsible.

The analysis for the JU-F (NZ) resulted in the extraction of eight factors accounting for 71.7% of the total variance. Four of the factors were given names:

- II. Social Morality - Polite, Self-controlled,
Clean, Optimistic, Obedient, Patient, Responsible,
Religious, Leadership.
- III. Achievement - Ambitious, Successful, Capable,
Clean, Active.
- IV. Sociability - Sociable, Popular, Pleasant, Self-revealing.
- V. Open-mindedness - Pliable, Open-minded, Loving,
Rational.

Senior University Level

The analysis for the SU-M (KOR) resulted in the extraction of six factors accounting for 66.3% of the total variance. Three of the factors were given names:

- III. Social Competence - Ambitious, Sociable, Active,
Self-revealing, Popular, Capable.
- IV. Competence and Morality - Courageous, Ambitious,
Independent, Self-controlled, Responsible,
Capable, Active, Progressive, Leadership, Patient,
Creative, Religious, Honest.
- V. Social Morality - Clean, Obedient, Polite,

Healthy, Honest, Loving.

The analysis for the SU-M (NZ) resulted in the extraction of seven factors accounting for 64.1% of the total variance. Five of the factors were given names:

- I. Consideration - Considerate, Rational, Patient, Helpful, Open-minded, Responsible, Pleasant, Self-controlled, Loving.
- II. Intellectual Competence - Successful, Intelligent, Ambitious, Rational.
- III. Social Morality - Obedient, Polite, Religious, Clean, Honest, Self-controlled.
- IV. Sociability - Sociable, Self-revealing, Popular, Loving, Pleasant.
- V. Initiative - Leadership, Active, Creative, Courageous, Ambitious, Capable.

The analysis for the SU-F (KOR) resulted in the extraction of seven factors accounting for 68.3% of the total variance. One of the factors was given a name:

- V. Activeness - Ambitious, Sociable, Active.

The analysis for the SU-F (NZ) resulted in the extraction of seven factors accounting for 73.8% of the total variance. Six of the factors were named:

- I. Cheerfulness and Consideration - Pleasant, Optimistic, Loving, Considerate, Helpful, Sociable, Self-revealing, Healthy, Patient.
- II. Religiosity - Religious, Obedient, Polite.
- IV. Social and Intellectual Competence - Successful, Leadership, Intelligent, Popular, Progressive, Rational, Sociable, Capable, Courageous.
- V. Social Morality - Self-controlled, Clean, Patient,

Polite, Active.

VI. Creativity - Courageous, Creative.

VII. Activeness - Ambitious, Active, Capable, Responsible.

II(ii). NAMED FACTORS OF CHRISTIANS AND NON-BELIEVERS (IDEAL SELF)

Junior University Level

The analysis of the JU-XN (KOR) resulted in the extraction of seven factors accounting for 78.4% of the total variance. Two of the factors were named:

- II. Social Competence and Achievement - Ambitious, Successful, Intelligent, Clean, Creative, Helpful, Pleasant, Independent, Capable.
- V. Initiative - Self-revealing, Leadership, Capable, Active, Sociable, Ambitious.

The analysis of the JU-XN (NZ) resulted in the extraction of seven factors accounting for 65.1% of the total variance. Four of the factors were named:

- II. Achievement and Competence - Ambitious, Successful, Intelligent, Independent, Capable, Progressive, Active, Courageous, Clean, Polite, Popular.
- IV. Religiosity - Religious, Obedient, Courageous.
- V. Sociability - Sociable, Self-revealing, Popular, Pliable.
- VI. Leadership - Leadership, Rational, Self-controlled.

The analysis for the JU-NB (KOR) resulted in the extraction of six factors accounting for 64.5% of the total variance. One of the factors was named:

- III. Cheerfulness - Pleasant, Optimistic, Loving.

The analysis for the JU-NB (NZ) resulted in the extraction

of seven factors accounting for 66.5% of the total variance.

Four of the factors were given names:

- II. Social Morality - Self-controlled, Polite, Patient, Clean, Responsible, Obedient, Leadership.
- III. Physical Adequacy - Healthy, Active, Courageous.
- IV. Social Competence - Successful, Ambitious, Progressive, Popular, Capable, Leadership, Intelligent, Sociable.
- VI. Sociability - Optimistic, Popular, Pleasant, Sociable, Self-revealing.

Senior University Level

The analysis for the SU-XN (KOR) resulted in the extraction of nine factors accounting for 76.8% of the total variance.

Three of the factors were named:

- III. Achievement and Competence - Active, Ambitious, Honest, Self-revealing, Capable, Healthy, Courageous, Intelligent, Creative.
- VI. Adaptability - Pliable, Independent, Capable, Creative, Open-minded, Self-controlled, Patient, Courageous, Clean.
- VII. Social Competence - Leadership, Popular, Sociable, Successful, Progressive, Rational, Optimistic, Creative.

The analysis for the SU-XN (NZ) resulted in the extraction of seven factors accounting for 66.5% of the total variance.

Six of the factors were named:

- I. Sociability and Consideration - Loving, Helpful, Pleasant, Patient, Optimistic, Considerate, Self-revealing, Sociable, Responsible, Religious.
- II. Social Competence - Successful, Intelligent,

Popular, Progressive, Leadership.

- III. Social Morality - Obedient, Polite, Self-controlled, Religious, Rational, Honest, Clean, Patient.
- IV. Adaptability - Open-minded, Pliable, Capable, Creative, Responsible, Independent.
- V. Activeness - Active, Ambitious, Healthy, Clean, Capable.
- VI. Courage - Courageous, Creative.

The analysis for the SU-NB (KOR) resulted in the extraction of six factors accounting for 63.9% of the total variance. Two of the factors were given names:

- I. Sociability - Sociable, Self-revealing, Pliable.
- III. Social Morality - Obedient, Religious, Polite Loving, Pleasant.

The analysis for the SU-NB (NZ) resulted in the extraction of nine factors accounting for 72.5% of the total variance. Five of the factors were named:

- I. Social Competence - Successful, Leadership, Courageous, Progressive, Popular, Intelligent, Capable, Responsible.
- II. Sociability - Self-revealing, Sociable, Open-minded, Popular, Loving, Pleasant.
- III. Social Morality - Polite, Obedient, Clean, Self-controlled.
- V. Altruism - Considerate, Helpful, Patient, Active, Pleasant, Self-controlled.
- VI. Activeness - Ambitious, Active, Capable, Creative, Clean.

III. COMPARISONS OF FACTOR STRUCTURES

The discussion below is concerned with comparisons between the two cultures and within each culture. In the present study, no effort was made to compare the factor structures statistically in order to identify the amount of invariance and disagreement among the groups. Instead, a visual examination of the factor structures across the different groups has been made.

It also should be noted that in some analyses (e.g., SU-F (NZ), JU-XN (KOR), SU-XN (KOR), Low-F (NZ) — see Table 8-1), the size of the sample was not so big enough for the factor analysis that the interpretation of data and comparison of factor structures between and within the two cultures have to be made with great caution.

III(i). A GENERAL PICTURE OF THE FACTOR STRUCTURES OF THE KOREAN AND NEW ZEALAND SAMPLES

1) Number of factors extracted — Both the Korean and New Zealand samples revealed a similar number : 9 - 10 factors in each actual self concept analysis and 6 - 7 factors in each ideal self concept analysis (see Table 8-1), thus indicating that the ideal self concept appeared to have a simpler factor structure than that of the actual self concept. The factors of the ideal self concept in general, however, were found to be somewhat more difficult to interpret. Hence, there was a greater incidence of complex factors which had a larger number of items with significant loadings in the ideal self concept (e.g., in the Factor V of JU-NB (KOR), there were as many as 26 out of the 30 items with significant loadings) than in the actual self concept.

2) Percentage of the total variance for the factors —

For both cultural samples, the percentage of the total variance for the various factors in each analysis followed a similar pattern as presented in Table 8-4 (see series of Appendices 15 and 16 for details).

(TABLE 8-4) PERCENTAGE OF THE VARIANCE FOR FACTORS EXTRACTED
FROM ACTUAL AND IDEAL SELF CONCEPT ANALYSES

	FACTORS	% OF THE VARIANCE
Actual Self Concept	I	20 - 30%
	II, III (each)	7 - 15%
	IV, V, VI (each)	5 - 7%
	VII, VIII, IX, X (each)	3 - 5%
Ideal Self Concept	I	30 - 48%
	II, III (each)	6 - 15%
	IV, V (each)	4 - 7%
	VI, VII (each)	3 - 5%

3) Factor loadings — The factor loadings in the New Zealand sample in general were found to be higher than those of the Korean sample. In the former, the first few items of the factors in each analysis were usually more than .70 — a loading rare in the analyses of the Korean sample, whose highest loadings in general were about .60. Furthermore, in some factors in several Korean analyses (e.g., Factors III of HS-NB (ACTUAL), VII of SU-M (ACTUAL), II of SU-F (ACTUAL), IV of JU-NB (IDEAL) and I of SU-M (IDEAL)), it was found that none of the items carried a loading of .40 or above. In these cases, loadings of .30 or above were included.

4) Nature of factors — In both the actual and ideal self concept analyses, the factors extracted from the New

Zealand sample were easier to interpret than those from the Korean sample. As presented in Table 8-2 and 8-3, there were more Named Factors in the New Zealand sample (87 factors in the 16 actual self concept analyses and 38 factors in the 8 ideal self concept analyses) than in the Korean sample (53 in the 16 actual self concept analyses and 15 in the 8 ideal self concept analyses). The number of Named Factors, however, varied from group (analysis) to group (analysis) within each sample. It was also found that there were far less Complex Factors and uninterpretable Bipolar Factors in the New Zealand sample (Complex Factors : Actual = 2, Ideal = 2; Bipolar Factors : Actual = 25, Ideal = 3) than in the Korean sample (Complex Factors : Actual = 15, Ideal = 14; Bipolar Factors : Actual = 45, Ideal = 10). As for the No-Relation Factors, although the difference was not great, the Korean number still exceeded that of the New Zealand in both actual (Korea = 17, New Zealand = 12) and ideal self concept analyses (Korea = 8, New Zealand = 6). Similarly, there were fewer Unnamed Factors in the Korean ideal self concept analyses than in the New Zealand ones (Korea = 1, New Zealand = 7), although their number was very similar in the actual self concept analyses (Korea = 13, New Zealand = 14) (see Table 8-2 and 8-3 for details).

5) Similar factors in the corresponding analyses of the two samples - One or two similar factors could be found in some (12) of the 24 corresponding analyses of the two cultures (e.g., HS-M (KOR) vs HS-M (N.Z.); JU-XN (KOR) vs JU-XN (N.Z.)). The corresponding analyses with similar factors are shown in Table 8-5.

(TABLE 8-5) COMMON FACTORS IN KOREAN AND NEW ZEALAND SAMPLES

	ANALYSES	COMMON FACTOR
Actual Self Concept	High - M	Social Morality, Sociability
	Low - M	Physical Adequacy, Achievement and Competence
	Low - F	Initiative
	HS - F	Sociability
	JU - XN	Physical Adequacy
	SU - XN	Social Morality, Religiosity
	SU - NB	Sociability, Extraversion
Ideal Self Concept	JU - XN	Social Competence and Achievement
	SU - M	Social Morality
	SU - F	Activeness
	SU - XN	Social Competence, Adaptability
	SU - NB	Social Morality, Sociability

However, it must be repeated here that most factors of the same name did not bear an identical list of items. Furthermore, a close examination of the other non-named factors also did not reveal any similarity in the factors between the two cultural samples.

From the above observations, it is safe to conclude that apart from the superficial similarity stated in 1) and 2), and the common factors presented in 5), the basic factor structures of the actual and ideal self concepts of the Korean and New Zealand young adults are quite different from each other. Hence Hypotheses 9 and 10 are not supported.

III(ii). A DETAILED COMPARISON OF THE VARIOUS GROUPS IN KOREA AND NEW ZEALAND

Males and Females

For the actual self concept of the Korean sample, there was little similarity in the factor structure of the males and females at any of the three educational levels. It was also true of their ideal self concepts. The only Named Factors which

showed similarity in the actual self concept between the males and females were Sociability (when compared HS-M and HS-F) and Social Competence (when compared Low-M and Low-F). In ideal self concepts no factors were found to have identical names between the males and females.

On the other hand, the New Zealand sample showed greater similarity in their factor structures between the male and female groups at all the three educational levels. In general, there were two or three common factors in the corresponding groups in both actual and ideal self concepts:

(TABLE 8-6) COMMON FACTORS IN NEW ZEALAND MALES AND FEMALES

	ANALYSES	COMMON FACTORS
Actual Self Concept	High-M & High-F Low-M & Low-F JU-M & JU-F	Social Morality, Sociability, Religiosity Sociability, Initiative, Achievement and Competence Physical Adequacy, Intellectual Success, Self-discipline
Ideal Self Concept	JU-M & JU-F SU-M & SU-F	Sociability, Social Morality Social Morality

This tendency of similarity in factor structures between the male and female groups was more outstanding at the lower educational levels than in the senior university level. Beyond the above-mentioned common factors (Table 8-6), little structural similarity was found in both actual and ideal self concepts at any educational level.

In general, the above findings support the earlier reports of Briar and Bieri (1963), Gordon (1968), Finch (1973) and Gaudreau (1977) that males and females differ in terms of

factor structures in their self concepts. Although it was shown that there were some similar factors among several New Zealand groups, our results are in contradiction to those of Richards (1966), Parker and Velder (1969), McIntire and Drummond (1976), and Kokenes (1974) who reported no factorial differences between the males and females.

CHRISTIANS AND NON-BELIEVERS

In general, factors extracted from the religion-based groups tended to be more complex and less interpretable than those extracted from the sex-based groups in both Korean and New Zealand samples.

The Korean sample showed very dissimilar factor structures in both actual and ideal self concepts at all educational levels. In four of the five comparisons (3 in actual and 2 in ideal self concepts), there was no common factor between the Christian and Non-believing groups. The only exception was Social Competence Factor which appeared to be similar between the HS-XN and HS-NB in actual self concept.

On the other hand, in the New Zealand sample, there were one to three factors which were comparable between the two in both actual and ideal self concepts at the university levels (see Table 8-7). However, the high school groups did not disclosed similar factors in their self concepts.

(TABLE 8-7) COMMON FACTORS IN NEW ZEALAND CHRISTIANS AND NON-BELIEVERS

	ANALYSES	COMMON FACTORS
Actual Self Concept	JU-XN & JU-NB SU-XN & SU-NB	Sociability, Physical Adequacy Sociability, Social Morality, Intellectual Competence
Ideal Self Concept	JU-XN & JU-NB SU-XN & SU-NB	Sociability Social Morality, Activeness

Although a few common factors could be found between the New Zealand university groups, it can be concluded that in general, the Christians and Non-believers do not have much similarity in the factor structures of their actual and ideal self concepts. This is in accordance with the findings of Finch (1973) whose study on the public and parochial students reveals that the factors emerged from their self descriptions were significantly dissimilar. In the present study, the dissimilarity is more apparent in the Korean sample.

HIGH AND LOW SES GROUPS

In general, there was little similarity in the factor structures of the High and Low SES groups in the Korean sample. The only common Named Factors found in the comparisons were Sociability (High-M vs Low-M) and Initiative (High-F vs Low-F), but the items included in these factors were not identical.

On the other hand, the New Zealand sample showed considerable similarity between the High and Low SES groups : Sociability, Independence and Social Morality (when compared High-M and Low-M), and Sociability and Open-mindedness (when compared High-F and Low-F). It should be noted, too that High-F (N.Z.) group was only analysis in which all its factors were given names.

From the above findings, we may conclude that the New Zealand sample showed greater similarity in the factor structures between the High and Low SES groups than did the Korean sample.

EDUCATIONAL LEVELS

In general, there was no distinctive similarity in the factor structures of the actual and ideal self concepts across the three educational levels in both the Korean and New Zealand

samples. However, the New Zealand sample still displayed considerably greater similarity than the Korean sample in both the actual and ideal self concepts.

An inspection of the factor structures across the three educational groups of the New Zealand sample reveals that there were more common factors between the JU and SU groups than between the HS and university groups (as shown in the reports in relation to sex and religion below). Such a trend was not present in the Korean sample. In the New Zealand sample, Physical Adequacy was the only factor which appeared to be similar in actual self concepts of male groups across the three educational levels, but in the Korean sample, there was none.

When sex and religion were taken into consideration, certain common factors could be found in the various educational groups as presented in Table 8-8.

(TABLE 8-8) COMMON FACTORS IN ACTUAL SELF CONCEPTS OF HS, JU AND
SU GROUPS

ACTUAL SELF	ANALYSES	COMMON FACTORS
Sex-based	Korea HS-M & SU-M HS-F & SU-F	Leadership Sociability
	N.Z. JU-M & SU-M HS-F & SU-F	Physical Adequacy, Open- mindedness, Intellectual Competence, Achievement and Competence Physical Adequacy, Social Morality
Religion- based	Korea HS-XN & JU-XN HS-NB & SU-NB	Social Competence Sociability
	N.Z. HS-NB & JU-NB JU-XN & SU-XN JU-NB & SU-NB	Physical Adequacy Religiosity, Sociability Sociability

The analyses of the ideal self concepts of the JU and SU groups in both cultural samples also indicated little similarity, although the New Zealand sample showed a few factors with identical names as follows.

JU-M & SU-M : Social Morality, Sociability
 JU-F & SU-F : Social Morality
 JU-NB & SU-NB : Social Morality, Sociability,
 Social Competence.

IV. SUMMARY AND CONCLUSION

From the evidence presented in the previous sections, several interesting points can be made:

- 1) In both the Korean and New Zealand samples, more factors were extracted from the actual self concepts than from the ideal self concepts and they were more easily interpretable.
- 2) Although there were exceptions, for the Korean sample there in general was little similarity in the factor structures of actual and ideal self concepts between male and female, between the Christians and Non-believers, between the High and Low SES groups and between the three educational levels.
- 3) On the other hand, although they tended to be more different than similar, the New Zealand sample showed a considerable number of common factors in the factor structures of their actual and ideal self concepts when the various groups classified according to sex, religious backgrounds, social class backgrounds and educational levels were compared. It is also noted that there were greater similarity in the factor structures of actual self concept when grouped according to sex than when grouped by religious backgrounds.
- 4) Some of the Named Factors in the present study are apparently related to those in the factor analytic studies by

other researchers. For example, the Sociability factor can be related to the Social Facilitation Factor of Parker and Veldman (1969), Social Self and Peer Success (Kokenes, 1974), Sociability (Richards, 1966; Finch, 1973) and Interpersonal Adequacy (Gordon, 1968); the Achievement and Competence of the present study to the Motivational Self (McIntire and Drummond, 1976) and Motivation for Intellectual Achievement (Mitchell, 1962); the Physical Adequacy to the Physical Well-being factor (Richards, 1966) and Physical Adequacy (Gordon, 1968); the Consideration to the Sensitivity to others (Richards, 1966), Warm-hearted Attitude to Others (Mitchell, 1962; Finch, 1973) and Social Warmth (Veldman and Parker, 1970); the Social Competence to the Social Competence (Finch, 1973) and the Intellectual Competence Factor of the present study to the Impersonal Efficiency (Mitchell, 1962; Finch, 1973).

The reports presented in this section were the results gathered, after 1) separate principal components analyses were performed for the 24 groups in each of the two cultures, 2) the resulting sets of factor were classified into six categories (Named Factors, Un-named Factors, Complex Factors, No-relation Factors, Bipolar Factors and One Variable Factors), and 3) these factors were compared according to culture, sex, religion, social class and educational level. Such comparisons revealed that the factor structure of both the actual and ideal self concepts, with minor similarity, vary from one to another, thus indicating that self concept is a very complex and multi-dimensional construct.

In general, the factor analytic results of the Korean sample compared to those of the New Zealand sample, were not clear-cut. Despite a few similar factors between the two

samples, there was in fact great dissimilarity in the factor structures of the actual and ideal self concepts. This dissimilarity was large enough to enable us to conclude that both the Korean and New Zealand samples do not have similar factor structures in their actual and ideal self concepts. Therefore, Hypotheses 9 and 10 are not supported by the present study. This seems to indicate that the cultural factor predominantly affects the structure of self concept, and the notion of "psychic unity" (Cole et al., 1971) appears to be challenged when the structure of self concept is the criteria for comparison.

CHAPTER NINE

SUMMARY AND CONCLUSION

In this comparative study, the patterns of differences (sex, religion, social class, and education-level) rather than the corresponding groups in the two cultures were compared. As in most cross-cultural studies, one of the serious problems to be overcome was the translation of the questionnaire. Hence, great care and attention were devoted to this area and the result seemed to be satisfactory.

As regards the findings of our study, which are briefly summarized in this Chapter, although they do not support most of the hypotheses, they do reveal relatively clear patterns describing the nature of the self concepts of the young adults in Korea and New Zealand.

1) Pattern of Sex Differences (Actual and Ideal Self Concepts)

Korean males and females differed in their self concepts along the Korean-styled male-dominated sex-role pattern favouring males in most of the attributes covered in the present study, while New Zealand young adults differed in their self concepts along the female-liberated sex-role pattern favouring females in many of the attributes covered in the study. In both cultures these patterns were more distinctive in the ideal self concept than in the actual (present) self concept. These results clearly indicate that both sexual and cultural factors are at work in the definition of the sex-role stereotypes which were clearly incorporated into the self concepts of young adults in both Korea and New Zealand.

Contrary to most researches which have reported on the strong influence exerted by traditional sex-role stereotypes on people's self concept (e.g.,

Rosenkrantz et al., 1968; Broverman et al., 1972), our results showed that the status of women in a society plays a decisive role in the way young adults perceive themselves. In New Zealand, for instance, the egalitarian nature of society has led to a virtual elimination of sex differences in the self concept of educated young adults along the male-valued achievement-competence dimension. Presumably, such a phenomenon is common in the modern world, where the increasing availability of educational and occupational opportunities for women as well as the influence of the feminist movement have enabled its females members to liberate themselves from the traditional sex-role stereotypes of their society. In a comparatively traditional society like Korea, however, it is only natural that there are still prominent sex differences in the self concept of her young adults.

Further research with an extended age range would be of value in assessing the relationship and changes mentioned above.

2) Pattern of Religion-based Differences (Actual and Ideal Self concepts)

A similar pattern was found in the actual self concept of both samples. Christians in general were found to show more positiveness in the moral-social oriented self concepts, while Non-believers perceived themselves as more independent. Such a pattern was more distinctive in the New Zealand sample.

The ideal self concept, however, showed up the differences in the two cultures. While religion-based differences in Korea were minimum (only the item Religious showed significant difference), in the New Zealand sample they were most significant along the achievement-competence (favouring the

Non-believers) as well as along the moral-social and conservative dimensions (favouring the Christians). Such a pattern is most surprising, especially when we consider the fact that New Zealand society is basically and at least nominally a Christian one. Nevertheless, in the case of Korea, where Buddhism and Confucianism have taken deep roots while Christianity has only been introduced for less than a century, it is not surprising that the former factors may exert more influence on people's self concepts than the latter.

Despite the cultural differences, it is undeniable that Christianity may boost the moral-social oriented self concepts of the individuals, yet it would be interesting to conduct further investigations to see if this is a common effect exerted by some other religions.

3) Pattern of Educational Level Differences (Actual Self Concept: High School and University, Ideal Self Concept: University only).

The pattern of educational level differences in both actual and ideal self concepts is very similar between Korean and New Zealand young adults. The university groups (JU and SU) appeared to have no significant difference in both their actual and ideal self concepts, and in general showed less positiveness than the high school group.

The most salient point of our findings here is the similarity in both actual and ideal self concepts between the junior and senior university groups, which seems to suggest that the stability of self concepts (actual and ideal) is attained by the age that young adults enter university and is maintained steadily during the university period without much drastic change despite the experience of university life.

Hence, the whole issue of "university impact" seems to be rather questionable. Therefore, it is suggested that future research use multiple comparison groups to include students attending tertiary institutions other than universities, as well as working young adults, so that the effects of university experience on self concept may be clarified.

Unlike most longitudinal studies on university impact, the one conducted by Katz et al., (1965) came to a conclusion very similar to our cross-sectional study. Therefore, it is also our recommendation that further investigation should be conducted to clarify this point.

4) Pattern of Social Class Differences (Actual Self Concept: High School only)

Contrary to our expectation, social class was not a significant factor differentiating the self concepts between the High SES and the Low SES groups in Korea, although the High group tended to show more positiveness in their self concepts than the Low group. In New Zealand, on the other hand, social class seems to be a considerable significance in differentiating the self concepts of the two groups: the Low group in general showed more positiveness along the achievement-competence oriented dimension as well as the social oriented dimension.

Our results from the New Zealand sample are contradictory to those commonly reported in the literature (e.g., Rokeach, 1969; Prendergast et al., 1974). As explained by Soares and Soares' view on social learning, Low SES subjects do not necessarily have less positive self concepts and they, indeed, have even more positive self concepts than High SES subjects. Hence, our findings have indicated that there is a need for

further research on the effects of social backgrounds on self concepts and how other variables (such as age, sex) affect this relationship.

5) Pattern of Subjective Changes in Self Concept.

Both samples display a significant increase in positiveness towards the future, and also more changes in the coming years. However, this pattern is more distinctive for the Korean sample.

This trend towards a more positive future can be explained by some theories concerning the future oriented tendency in men (e.g., Kastenbaum, 1961; Lee, 1974; Allport, 1961) and the relationship between high achievement motivations and strong anticipation of future goals (e.g., McClelland, 1961). Hence, we may conclude that the individual's subjective anticipation of positive changes in their self concepts is closely related to their achievement motivation and the general direction of thoughts towards the future. Nevertheless, researches in this area should define more precisely the functions of future orientation and achievement motivation as psychological constructs in relation to subjective changes in self concept. Similarly, further investigation is needed to find out if social class and sex differences have any effect in the subjective anticipation of changes in self concept at various age levels, since many researches have reported on the effect of these differences and developmental influences on future orientation and achievement motivation.

6) Factor Structures (Actual and Ideal Self Concepts)

It was found that both actual and ideal self concepts of the various groups in each culture had different factor structures when these groups were divided according to sex,

religion, social class and educational level differences, although greater similarity could be found among the New Zealand groups. It was also found that apart from the minor similarity in a few comparisons, the Korean and New Zealand young adults showed great dissimilarity in the factor structure of both their actual and ideal self concepts. This seems to indicate the important role played by the cultural factors in the structure of self concept and that the notion of "psychic unity" (Cole et al., 1971) is challenged when the factor structure of self concept is the criterion for comparison between the cultures.

The absence of clear-cut factor structures in the present study, however, may be attributed to the technique of factor analysis itself: Taft (1963) is convinced that the weakest aspect of factor analysis is undoubtedly its inability to produce clearly comparable basic dimensions between one study to another. This statement seems to be too strong, but it has repeatedly been shown to be true (e.g., Ray, 1973; Lykken, 1971).

Nonetheless, the present factor analytic study has produced several useful hypotheses which should be tested on large samples:

- 1) There would be different patterns of self concepts between members of different groupings (culture, sex, religion, etc.).
- 2) There would be greater similarity within the factor structures of the New Zealand sample than in the Korean sample.
- 3) Within each culture (especially in New Zealand), high school and university groups tend to have different factor structures in their self concepts.

GENERAL CONCLUSION

The present study has demonstrated relatively clear pictures of the cross-cultural differences and similarities in self concepts of young adults in Korea and New Zealand. On the basis of our results, we can conclude that the cross-cultural differences were predominantly more outstanding than the cross-cultural similarities. These differences can definitely be attributed to recognisable features particular to each culture, thus indicating that the self concept is a product of socio-cultural participation and recognition in a given culture. This is one of the most important conclusions of our study.

Another valuable conclusion based on our research is that there exists cross-cultural similarity in subjective anticipation of changes in self concept, and in the pattern of educational level differences in self concept. Regardless of their cultural backgrounds, young adults perceive themselves to change in a positive direction along the time dimension ($PA < PR < FU$), and more changes are anticipated in the future than perceived in the past. Both Korean and New Zealand young adults also showed nearly identical pattern of educational level differences: $HS < JU \div SU$ in actual self concept and $JU \div SU$ in ideal self concept. Our findings among university students, in particular, are consistent with Jacob's argument (Jacob, 1957) that the main effect of university experience is the production of homogeneous beliefs, attitudes and values among university students. However, it is difficult, at this point, to generalize these findings to other cultures.

As regards the methodology of this study, it is observed that the use of simple self-rating scale could be of considerable

value in gathering information about self concept or personality. Nevertheless, it is also noted that a more refined version of the present questionnaire is desirable.

Finally, although there have been numerous studies on self concept in the literature, as yet little research has been done in this field with either Korean and New Zealand subjects. It is hoped that the present study may stimulate interests and further investigations in these cultures, so that we may come to understand more about the self concept of people which determines their behaviour, and how the environment (social and cultural) influences the development of the self concept.

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Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION)

A SELF-CONCEPT QUESTIONNAIRE

This is an experiment about self concept which is part of a planned cross-cultural study.

The questionnaire consists of four parts, each of which contains 30 items divided into two subscales, Personal Self and Social Self. Each of the four parts relates to different aspects of the way that you think about yourself, as follows:

- Part 1. Yourself as you are at present,
- Part 2. Changes in how you see yourself in the last 2 years,
- Part 3. Changes in how you see yourself in the next 2 years, and
- Part 4. The degree of importance of each item as part of your ideal or desirable self.

Each part of the questionnaire has its own instructions which you will be asked to follow. Please read the instructions carefully and respond to all items in the way you are shown.

This questionnaire will be administered completely anonymously and your answers will never be disclosed. Thank you.

Age: yrs mths.

Sex _____

Marital Status: _____

Religion _____

Year in school/University: (Form 5; Stage III etc): _____

Number of brothers: _____ sisters: _____

Your position in your family: (first child, second child etc.): _____

Your home town: _____

How Long have you lived in N.Z.: _____

Father's age: _____

Father's educational level: _____

Father's occupation (as specific as possible): _____

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PART 1: PRESENT SELF-CONCEPT

Here are two lists of words, each of which can describe yourself to some degree as you are at present.

If you are only average in this quality, give yourself 0.

If you have it exceptionally, give yourself +50.

If you lack it exceptionally, give yourself -50.

Use any other intermediate score in this range, from +50 to -50, to express how much you think you have this quality. For example, a record which was filled in like this:

(-30) PESSIMISTIC Looking on the gloomy side

(+20) FRIVOLOUS Amused by trivial things

(15) GREGARIOUS Fond of joining in social groups

would mean that the person who filled it in thought him or herself to be far below average on pessimism, well above average on frivolity, and above average on gregariousness.

Do not think too long about any one word: Answer as soon as you have thought it through and then go on with the next word. Please do not omit any word.

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PERSONAL SELF

- () ACTIVE (energetic, vigorous)
 - () AMBITIOUS (hardworking, aspiring)
 - () CAPABLE (competent, effective)
 - () CLEAN (neat, having a tidy appearance)
 - () COURAGEOUS (brave, daring)
 - () CREATIVE (imaginative, productive)
 - () HEALTHY (feeling in good health, fit)
 - () HONEST (sincere, truthful)
 - () INTELLIGENT (clever, mentally able)
 - () OPTIMISTIC (hopeful, sanguine)
 - () PATIENT (persevering, enduring)
 - () PLEASANT (cheerful, happy)
 - () RATIONAL (logical, consistent)
 - () RELIGIOUS (having faith, devout)
 - () SELF-CONTROLLED (self-disciplined, restrained)
-

SOCIAL SELF

- () CAPABLE OF LEADERSHIP (having initiative, leading people)
- () CONSIDERATE (understanding, thoughtful)
- () HELPFUL (co-operative, working for the welfare of others)
- () INDEPENDENT (self-reliant, self-sufficient)
- () LOVING (affectionate, tender)
- () OBEDIENT (dutiful, respectful)
- () OPEN-MINDED (broad-minded, tolerant)
- () PLIABLE (flexible, adaptable)
- () POLITE (courteous, well-mannered)
- () POPULAR (well-liked by others, attractive)
- () PROGRESSIVE (forward looking, innovative)
- () RESPONSIBLE (reliable, dependable)
- () SELF-REVEALING (self-disclosing, self-expressing)
- () SOCIABLE (friendly, liking to meet people)
- () SUCCESSFUL (superior, achieving)

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PART II: CHANGES OF SELF-CONCEPT IN THE PAST

Now use the scores slightly differently.

If you think you have not changed in this quality in the last 2 years, give yourself 0.

If you have increased exceptionally, give yourself +50.

If you have decreased exceptionally, give yourself -50.

Use any other intermediate scores in this range, from +50 to -50, to express how much you have changed in this quality, gaining or losing it.

For example, a record which was filled in like this:

(-30) PESSIMISTIC Looking on the gloomy side
(+20) FRIVOLOUS Amused by trivial things
(+5) GREGARIOUS Fond of joining in social groups

would mean that the person who filled it in thought him or herself to have diminished very much in the last two years on pessimism; to have gained much in frivolity and to have gained slightly in gregariousness.

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PERSONAL SELF.

- () ACTIVE (energetic, vigorous)
 - () AMBITIOUS (hardworking, aspiring)
 - () CAPABLE (competent, effective)
 - () CLEAN (neat, having a tidy appearance)
 - () COURAGEOUS (brave, daring)
 - () CREATIVE (imaginative, productive)
 - () HEALTHY (feeling in good health, fit)
 - () HONEST (sincere, truthful)
 - () INTELLIGENT (clever, mentally able)
 - () OPTIMISTIC (hopeful, sanguine)
 - () PATIENT (persevering, enduring)
 - () PLEASANT (cheerful, happy)
 - () RATIONAL (logical, consistent)
 - () RELIGIOUS (having faith, devout)
 - () SELF-CONTROLLED (self-disciplined, restrained)
-

SOCIAL SELF

- () CAPABLE OF LEADERSHIP (having initiative, leading people)
- () CONSIDERATE (understanding, thoughtful)
- () HELPFUL (co-operative, working for the welfare of others)
- () INDEPENDENT (self-reliant, self-sufficient)
- () LOVING (affectionate, tender)
- () OBEDIENT (dutiful, respectful)
- () OPEN-MINDED (broad-minded, tolerant)
- () PLIABLE (flexible, adaptable)
- () POLITE (courteous, well-mannered)
- () POPULAR (well-liked by others, attractive)
- () PROGRESSIVE (forward looking, innovative)
- () RESPONSIBLE (reliable, dependable)
- () SELF-REVEALING (self-disclosing, self-expressing)
- () SOCIABLE (friendly, liking to meet people)
- () SUCCESSFUL (superior, achieving)

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PART III: CHANGES OF SELF-CONCEPT IN THE FUTURE

If you think, you will not change in this quality in the next 2 years, give yourself 0.

If you will increase exceptionally, give yourself +50.

If you will decrease exceptionally, give yourself -50.

Use any other intermediate scores in this range, from +50 to -50 to express how much you will change in this quality.

For example, a record which was filled in like this:

(-30)	PESSIMISTIC	Looking on the gloomy side
(+20)	FRIVOLOUS	Amused by trivial things
(+5)	GREGARIOUS	Fond of joining in social groups

would mean that the person who filled it in thought he or she would diminish very much in the next two years on pessimism; would gain much in frivolity and would gain slightly in gregariousness.

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PERSONAL SELF

- () ACTIVE (energetic, vigorous)
 - () AMBITIOUS (hardworking, aspiring)
 - () CAPABLE (competent, effective)
 - () CLEAN (neat, having a tidy appearance)
 - () COURAGEOUS (brave, daring)
 - () CREATIVE (imaginative, productive)
 - () HEALTHY (feeling in good health, fit)
 - () HONEST (sincere, truthful)
 - () INTELLIGENT (clever, mentally able)
 - () OPTIMISTIC (hopeful, sanguine)
 - () PATIENT (persevering, enduring)
 - () PLEASANT (cheerful, happy)
 - () RATIONAL (logical, consistent)
 - () RELIGIOUS (having faith, devout)
 - () SELF-CONTROLLED (self-disciplined, restrained)
-

SOCIAL SELF

- () CAPABLE OF LEADERSHIP (having initiative, leading people)
- () CONSIDERATE (understanding, thoughtful)
- () HELPFUL (co-operative, working for the welfare of others)
- () INDEPENDENT (self-reliant, self-sufficient)
- () LOVING (affectionate, tender)
- () OBEDIENT (dutiful, respectful)
- () OPEN-MINDED (broad-minded, tolerant)
- () PLIABLE (flexible, adaptable)
- () POLITE (courteous, well-mannered)
- () POPULAR (well-liked by others, attractive)
- () PROGRESSIVE (forward looking, innovative)
- () RESPONSIBLE (reliable, dependable)
- () SELF-REVEALING (self-disclosing, self-expressing)
- () SOCIABLE (friendly, liking to meet people)
- () SUCCESSFUL (superior, achieving)

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PART IV: IDEAL SELF-CONCEPT

In this part, your task is to give a score to each of the items according to the degree of its desirability as one of your ideal self-attributes.

If you think it to be neither desirable nor undesirable, give it a score of 0.

If you think it extremely desirable, give it a score of +50.

If you think it completely undesirable, give it a score of -50.

Use any other intermediate score in this range, from +50 to -50 to express how desirable you think the item to be as part of your ideal self-attributes. For example, a record which was filled in like this:

(-30)	HAPPY	Feeling cheerful
(+5)	FRIVOLOUS	Amused by trivial things
(+20)	GREGARIOUS	Fond of joining in social groups

would mean that the person who filled it in thought HAPPINESS to be very undesirable, FRIVOLITY slightly desirable, and GREGARIOUSNESS of considerable desirability.

Thank you for your help.

Appendix 1

A SELF CONCEPT QUESTIONNAIRE (ENGLISH VERSION) CONTD.

PERSONAL SELF

- () ACTIVE (energetic, vigorous)
- () AMBITIOUS (hardworking, aspiring)
- () CAPABLE (competent, effective)
- () CLEAN (neat, having a tidy appearance)
- () COURAGEOUS (brave, daring)
- () CREATIVE (imaginative, productive)
- () HEALTHY (feeling in good health, fit)
- () HONEST (sincere, truthful)
- () INTELLIGENT (clever, mentally able)
- () OPTIMISTIC (hopeful, sanguine)
- () PATIENT (persevering, enduring)
- () PLEASANT (cheerful, happy)
- () RATIONAL (logical, consistent)
- () RELIGIOUS (having faith, devout)
- () SELF-CONTROLLED (self-disciplined, restrained)

SOCIAL SELF

- () CAPABLE OF LEADERSHIP (having initiative, leading people)
- () CONSIDERATE (understanding, thoughtful)
- () HELPFUL (co-operative, working for the welfare of others)
- () INDEPENDENT (self-reliant, self-sufficient)
- () LOVING (affectionate, tender)
- () OBEDIENT (dutiful, respectful)
- () OPEN-MINDED (broad-minded, tolerant)
- () PLIABLE (flexible, adaptable)
- () POLITE (courteous, well-mannered)
- () POPULAR (well-liked by others, attractive)
- () PROGRESSIVE (forward looking, innovative)
- () RESPONSIBLE (reliable, dependable)
- () SELF-REVEALING (self-disclosing, self-expressing)
- () SOCIABLE (friendly, liking to meet people)
- () SUCCESSFUL (superior, achieving)

Appendix 2

A SELF CONCEPT QUESTIONNAIRE (KOREAN VERSION)

자아개념에 관한 질문서

이 질문서는 문화적배경을 달리하는 동,서양인간의 "자아개념"에 어떠한 차이가 있는지를 비교 연구하기 위하여 작성된 것입니다.

자아개념이라 함은 나 자신에 대해서 내가 어떻게 생각하고 있느냐?에 관한 것입니다. 이 질문서를 해나가는 동안 그 뜻에 대해서 곧 익숙해 질 것입니다.

이 질문서는 아래와 같이 4부로 나뉘어져 있으며 각부마다 똑같은 30개의 문항이 있고 편의상 개인적 자아와 사회적 자아로 구분해 놓았습니다.

각각 여러분 자신을 이들 문항에 비추어볼수 있도록 하였습니다.

제 1 부 : 현재의 나 자신을 어떻게 보고 있는가

제 2 부 : 지난 2년동안 나 자신이 얼마나 변해왔는가

제 3 부 : 앞으로 2년동안 나 자신이 얼마나 변해갈 것인가

제 4 부 : 나 자신이 가장 이상적이라고 생각하는 자아개념은 어떤것인가

각부마다 따로 따로 여러분의 자아개념을 평가하는 방법이 실례와 함께 상세히 설명되어 있습니다. 주의깊게 지시내용을 읽고 한 문항도 빠짐없이 모두 답해주시기 바랍니다. 이 질문서는 무기명으로 실시되며 그 내용은 종합적인 자료처리를 위해서만 사용될 것입니다. 감사합니다.

연 령 : 만 년 개월 성별 : 남 여

결 혼 여 부 : 미혼, 결혼 종교 : 없음, 기독교, (천주교), 불교, 유교, 기타

학 년 : 고등학교 년 / 대학교 년 / 대학원 년

형 제 수 : 남자 명, 여자 명 출생순위 : 번째

부친의 연령 : (부친이없으면 모친, 모친도없으면 보호자)

부친의 학력 : 무학, 국졸(퇴), 중퇴, 중졸, 고퇴, 고졸, 대퇴, 대졸(전문), 대학원졸

부친의 직업(구체적으로) :

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A SELF CONCEPT QUESTIONNAIRE (KOREAN VERSION) CONTD.

제 1 부 현재의 자아개념

다음 페이지에 현재 나 자신의 상태를 어느정도 설명해 줄수있는 30개의 문항이 제시되어 있습니다. 각각의 문항에 비추어진 현재의 나 자신을 보고 다음과 같이 점수를 주시기 바랍니다.

만일 현재의 나 자신이 그 문항에 있어 보통정도라고 생각되면 0점,

만일 현재의 나 자신이 그 문항에 있어 극단적으로 그렇다고 생각되면 +50점,

만일 현재의 나 자신이 그 문항에 있어 극단적으로 반대라고 생각되면 -50점.

아래의 예에서와 같이 +50점으로 부터 -50점사이에 있는 어떤 임의의 점수를 사용해서 각 문항에 비추어진 현재의 여러분 자신을 기술하시기 바랍니다.

[- 30] 비관적이다 (어두운면만을 생각하는)

[+ 20] 경박하다 (하찮은 일에도 잘 웃어대는)

[+ 15] 사교적이다 (사교집단에 참여하기를 좋아하는)

이렇게 점수를 준 사람은 현재의 자기 자신을 볼때 많이 비관적이 아니며 (즉, 많이 낙관적이며), 많이 경박하며, 그리고 상당히 사교적임을 말해주고 있습니다.

한 문항에 대해 너무오래 생각하지 말고 그 문항을 읽고 자기 자신에 비추어 생각이 떠오르는 대로 곧 점수를 주고 다음 문항으로 넘어가시기 바랍니다. 한 문항도 빠짐없이 모두 응답해 주시기 바랍니다.

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개인적 자아

- | | | |
|-----|---------|-----------------------|
| [] | 활동적이다 | (기운이 넘치고, 정력적이다) |
| [] | 야망적이다 | (열심히 일하고, 포부가 크다) |
| [] | 유능하다 | (역량이 있고, 능률적이다) |
| [] | 단정하다 | (깨끗하고, 외모가 바르다) |
| [] | 용기있다 | (용감하고, 대담하다) |
| [] | 창의력이 있다 | (상상력이 풍부하고, 생산적이다) |
| [] | 건강하다 | (건강에 자신이 있고, 튼튼하다) |
| [] | 정직하다 | (성실하고, 거짓이 없다) |
| [] | 똑똑하다 | (영리하고, 머리가 좋다) |
| [] | 낙관적이다 | (희망에 차있으며, 매사를 좋게 본다) |
| [] | 참을성이 있다 | (인내심이 있고, 꾸준히 잘 견딘다) |
| [] | 명랑하다 | (유쾌하고, 마음이 즐겁다) |
| [] | 합리적이다 | (논리적이고, 모순이 없다) |
| [] | 종교적이다 | (신앙심이 있고, 종교에 헌신적이다) |
| [] | 자제력이 있다 | (절제를 하고, 자기수양이 되어있다) |

사회적 자아

- | | | |
|-----|-----------|--------------------------|
| [] | 지도력이 있다 | (스스로 앞장서며, 사람들을 잘 이끌어간다) |
| [] | 사려깊다 | (이해심이 있고, 남을 생각해 준다) |
| [] | 협조적이다 | (협동적이며, 남을위해 일하고자 한다) |
| [] | 독립적이다 | (남에게 의지하지 않으며, 자부심이 강하다) |
| [] | 다정하다 | (애정이 넘치고, 부드럽다) |
| [] | 순종적이다 | (본분을 지키며, 아래사람의 도리를 다한다) |
| [] | 도량이 넓다 | (마음이 활달하고, 관용적이다) |
| [] | 융통성이 있다 | (변통이 있고, 적응력이 있다) |
| [] | 예의 바르다 | (공손하고, 예절이 바르다) |
| [] | 인기가 있다 | (타인의 호감을 사며, 매력적이다) |
| [] | 진취적이다 | (앞을 내다볼줄 알며, 혁신적이다) |
| [] | 책임감이 있다 | (믿음직하고, 신용이 있다) |
| [] | 자기표현을 잘한다 | (자신을 감추려하지 않으며, 표현력이 있다) |
| [] | 사교적이다 | (친절하고, 사람사귀기를 좋아한다) |
| [] | 성공감에 차있다 | (우수하고, 목표를 달성하려 한다) |

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제 2 부 과거의 자아개념

제 2부에서는 제 1부와는 약간 달리 과거 2년동안 여러분의 자아개념이 얼마나 많이 변해 왔는가를 측정하게 됩니다.

만일 나 자신이 그 문항에 있어 지난 2년동안 전혀 변하지 않았다고 생각되면 ○점,

만일 나 자신이 지난 2년동안 그 문항과 같은 방향으로 극단적으로 많이 변(증가)했다면 +50점,

만일 나 자신이 지난 2년동안 그 문항과는 반대 방향으로 극단적으로 많이 변(감소)했다면 -50점.

아래의 예에서와 같이 +50점으로 부터 -50점 사이에 있는 어떤 임의의 점수를 사용해서 지난 2년동안의 여러분 자신의 변화도를 기술하시기 바랍니다.

[- 30] 비관적이다 (어두운면만을 생각하는)

[+ 20] 경박하다 (하찮은 일에도 잘 웃어대는)

[+ 5] 사교적이다 (사교 집단에 참여하기를 좋아하는)

이렇게 점수를 준 사람은 지난 2년동안 비관적인 면이 많이 감소 되었고, 많이 경박해 졌으며, 그리고 약간 사교적으로 변했음을 말해주고 있습니다.

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개인적 자아

- | | | |
|-----|---------|-----------------------|
| [] | 활동적이다 | (기운이 넘치고, 정력적이다) |
| [] | 야망적이다 | (열심히 일하고, 포부가 크다) |
| [] | 유능하다 | (역량이 있고, 능률적이다) |
| [] | 단정하다 | (깨끗하고, 외모가 바르다) |
| [] | 용기있다 | (용감하고, 대담하다) |
| [] | 창의력이 있다 | (상상력이 풍부하고, 생산적이다) |
| [] | 건강하다 | (건강에 자신이 있고, 튼튼하다) |
| [] | 정직하다 | (성실하고, 거짓이 없다) |
| [] | 똑똑하다 | (영리하고, 머리가 좋다) |
| [] | 낙관적이다 | (희망에 차있으며, 배사를 좋게 본다) |
| [] | 참을성이 있다 | (인내심이 있고, 꾸준히 잘 견딘다) |
| [] | 명랑하다 | (유쾌하고, 마음이 즐겁다) |
| [] | 합리적이다 | (논리적이고, 모순이 없다) |
| [] | 종교적이다 | (신앙심이 있고, 종교에 헌신적이다) |
| [] | 자제력이 있다 | (절제를 하고, 자기수양이 되어 있다) |

사회적 자아

- | | | |
|-----|-----------|--------------------------|
| [] | 지도력이 있다 | (스스로 앞장서며, 사람들을 잘 이끌어간다) |
| [] | 사려깊다 | (이해심이 있고, 남을 생각해 준다) |
| [] | 협조적이다 | (협동적이며, 남을 위해 일하고자 한다) |
| [] | 독립적이다 | (남에게 의지하지 않으며, 자부심이 강하다) |
| [] | 다정하다 | (애정이 넘치고, 부드럽다) |
| [] | 순종적이다 | (본분을 지키며, 아래사람의 도리를 다한다) |
| [] | 도량이 넓다 | (마음이 활달하고, 관용적이다) |
| [] | 융통성이 있다 | (변통이 있고, 적응력이 있다) |
| [] | 예의 바르다 | (공손하고, 예절이 바르다) |
| [] | 인기가 있다 | (타인의 호감을 사며, 매력적이다) |
| [] | 진취적이다 | (앞을 내다볼 줄 알며, 혁신적이다) |
| [] | 책임감이 있다 | (믿음직하고, 신용이 있다) |
| [] | 자기표현을 잘한다 | (자신을 감추려하지 않으며, 표현력이 있다) |
| [] | 사교적이다 | (친절하고, 사람사귀기를 좋아한다) |
| [] | 성공감에 차있다 | (우수하고, 목표를 달성하려 한다) |

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제 3 부 미래의 자아개념

제3부는 여러분의 자아개념이 앞으로의 2년동안 얼마나 많이 변해갈것인가를 측정하게 됩니다.

만일 나 자신이 그 문항에 있어 앞으로의 2년동안 전혀 변하지 않을것이라고 생각되면 ○점,

만일 나 자신이 앞으로의 2년동안 그 문항과 같은 방향으로 극단적으로 많이 변(증가)해 갈것이라고 생각되면 +50점,

만일 나 자신이 앞으로의 2년동안 그 문항과는 반대방향으로 극단적으로 많이 변(감소)해 갈것이라고 생각되면 -50점.

아래의 예에서와 같이 +50점으로 부터 -50점사이에 있는 어떤 임의의 점수를 사용해서 앞으로 2년동안에 여러분이 예상하는, 자신의 변화도를 기술하시기 바랍니다.

[- 30] 비관적이다 (어두운면만을 생각하는)

[+ 20] 경박하다 (하찮은 일에도 잘 웃어대는)

[+ 5] 사교적이다 (사교 집단에 참여하기를 좋아하는)

이렇게 점수를 준 사람은 앞으로의 2년동안 비관적인 면이 많이 감소 될 것이고, 많이 경박해질 것이며, 그리고 약간 사교적으로 변해갈것임을 말해주고 있습니다.

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개인적 자아

- | | | |
|-----|---------|-----------------------|
| [] | 활동적이다 | (기운이 넘치고, 정력적이다) |
| [] | 야망적이다 | (열심히 일하고, 포부가 크다) |
| [] | 유능하다 | (역량이 있고, 능률적이다) |
| [] | 단정하다 | (깨끗하고, 외모가 바르다) |
| [] | 용기있다 | (용감하고, 대담하다) |
| [] | 창의력이 있다 | (상상력이 풍부하고, 생산적이다) |
| [] | 건강하다 | (건강에 자신이 있고, 튼튼하다) |
| [] | 정직하다 | (성실하고, 거짓이 없다) |
| [] | 똑똑하다 | (영리하고, 머리가 좋다) |
| [] | 낙관적이다 | (희망에 차있으며, 매사를 좋게 본다) |
| [] | 참을성이 있다 | (인내심이 있고, 꾸준히 잘 견딘다) |
| [] | 명랑하다 | (유쾌하고, 마음이 즐겁다) |
| [] | 합리적이다 | (논리적이고, 모순이 없다) |
| [] | 종교적이다 | (신앙심이 있고, 종교에 헌신적이다) |
| [] | 자제력이 있다 | (절제를 하고, 자기수양이 되어 있다) |

사회적 자아

- | | | |
|-----|-----------|--------------------------|
| [] | 지도력이 있다 | (스스로 앞장서며, 사람들을 잘 이끌어간다) |
| [] | 사려깊다 | (이해심이 있고, 남을 생각해 준다) |
| [] | 협조적이다 | (협동적이며, 남을위해 일하고자 한다) |
| [] | 독립적이다 | (남에게 의지하지 않으며, 자부심이 강하다) |
| [] | 다정하다 | (애정이 넘치고, 부드럽다) |
| [] | 순종적이다 | (본분을 지키며, 아래사람의 도리를 다한다) |
| [] | 도량이 넓다 | (마음이 활달하고, 관용적이다) |
| [] | 융통성이 있다 | (변통이 있고, 적응력이 있다) |
| [] | 예의 바르다 | (공손하고, 예절이 바르다) |
| [] | 인기가 있다 | (타인의 호감을 사며, 매력적이다) |
| [] | 진취적이다 | (앞을 내다볼줄 알며, 혁신적이다) |
| [] | 책임감이 있다 | (믿음직하고, 신용이 있다) |
| [] | 자기표현을 잘한다 | (자신을 감추려하지 않으며, 표현력이 있다) |
| [] | 사교적이다 | (친절하고, 사람사귀기를 좋아한다) |
| [] | 성공감에 차있다 | (우수하고, 목표를 달성하려 한다) |

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제 4 부 이상적인 자아개념

제 4부에서는 각각의 문항이 여러분의 이상적인 자아의 특징으로서 어느정도 바람직한가를 측정하게 됩니다.

만일 그 문항이 나 자신의 이상적인 자아의 특징으로서 바람직하지도 않고 그저 그렇다고 생각되면 ○점,

만일 그 문항이 나 자신의 이상적인 자아의 특징으로서 극단적으로 많이 바람직하다고 생각되면 +50점,

만일 그 문항이 나 자신의 이상적인 자아의 특징으로서 극단적으로 많이 바람직하지 않다고 생각되면 -50점.

아래의 예에서와 같이 +50점으로 부터 -50점 사이에 있는 어떠한 임의의 점수를 사용해서 여러분의 이상적인 자아개념을 기술하시기 바랍니다.

[+ 5] 행복하다 (늘 즐거워하는)

[- 30] 경박하다 (하찮은 일에도 잘 웃어대는)

[+ 20] 사교적이다 (사교 집단에 참여하기를 좋아하는)

이렇게 점수를 준 사람은 이상적인 자아의 특징으로서 "행복감"은 약간 바람직하고 "경박함"은 많이 바람직하지 못하며, 그리고 "사교성"은 많이 바람직하다고 말해주고 있습니다.

협조해 주셔서 대단히 감사합니다.

Appendix 2

A SELF CONCEPT QUESTIONNAIRE (KOREAN VERSION) CONTD.

개인적 자아

- | | | |
|-----|---------|-----------------------|
| [] | 활동적이다 | (기운이 넘치고, 정력적이다) |
| [] | 야망적이다 | (열심히 일하고, 포부가 크다) |
| [] | 유능하다 | (역량이 있고, 능률적이다) |
| [] | 단정하다 | (깨끗하고, 외모가 바르다) |
| [] | 용기있다 | (용감하고, 대담하다) |
| [] | 창의력이 있다 | (상상력이 풍부하고, 생산적이다) |
| [] | 건강하다 | (건강에 자신이 있고, 튼튼하다) |
| [] | 정직하다 | (성실하고, 거짓이 없다) |
| [] | 똑똑하다 | (영리하고, 머리가 좋다) |
| [] | 낙관적이다 | (희망에 차있으며, 매사를 좋게 본다) |
| [] | 참을성이 있다 | (인내심이 있고, 꾸준히 잘 견딘다) |
| [] | 명랑하다 | (유쾌하고, 마음이 즐겁다) |
| [] | 합리적이다 | (논리적이고, 모순이 없다) |
| [] | 종교적이다 | (신앙심이 있고, 종교에 헌신적이다) |
| [] | 자제력이 있다 | (절제를 하고, 자기수양이 되어 있다) |

사회적 자아

- | | | |
|-----|-----------|--------------------------|
| [] | 지도력이 있다 | (스스로 앞장서며, 사람들을 잘 이끌어간다) |
| [] | 사려깊다 | (이해심이 있고, 남을 생각해 준다) |
| [] | 협조적이다 | (협동적이며, 남을위해 일하고자 한다) |
| [] | 독립적이다 | (남에게 의지하지 않으며, 자부심이 강하다) |
| [] | 다정하다 | (애정이 넘치고, 부드럽다) |
| [] | 순종적이다 | (본분을 지키며, 아래사람의 도리를 다한다) |
| [] | 도량이 넓다 | (마음이 활달하고, 관용적이다) |
| [] | 융통성이 있다 | (변통이 있고, 적응력이 있다) |
| [] | 예의 바르다 | (공손하고, 예절이 바르다) |
| [] | 인기가 있다 | (타인의 호감을 사며, 매력적이다) |
| [] | 진취적이다 | (앞을 내다볼줄 알며, 혁신적이다) |
| [] | 책임감이 있다 | (믿음직하고, 신용이 있다) |
| [] | 자기표현을 잘한다 | (자신을 감추려하지 않으며, 표현력이 있다) |
| [] | 사교적이다 | (친절하고, 사람사귀기를 좋아한다) |
| [] | 성공감에 차있다 | (우수하고, 목표를 달성하려 한다) |

Appendix 3

COMPARISON BETWEEN THE ORIGINAL AND THE BACK-TRANSLATED VERSIONS.

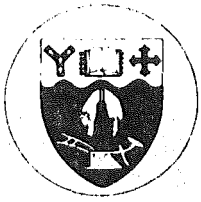
1. Original (O): Active (energetic, vigorous)
Back-translated (B): Active (energetic, vigorous)
2. O : Ambitious (hardworking, aspiring)
B : Ambitious (working hard, having a big ambition)
3. O : Capable (competent, effective)
B : Capable (competent, effective)
4. O : Clean (neat, having a tidy appearance)
B : Neat (clean, having a neat-looking appearance)
5. O : Courageous (brave, daring)
B : Courageous (brave, daring)
6. O : Creative (imaginative, productive)
B : Creative (imaginative, productive)
7. O : Healthy (feeling in good health, fit)
B : Healthy (confident in health, physically well)
8. O : Honest (sincere, truthful)
B : Honest (sincere, truthful)
9. O : Intelligent (clever, mentally able)
B : Clever (sharp, intelligent)
10. O : Optimistic (hopeful, sanguine)
B : Optimistic (hopeful, taking things positively)
11. O : Patient (persevering, enduring)
B : Patient (persevering, enduring)
12. O : Pleasant (cheerful, happy)
B : Cheerful (merry, happy)
13. O : Rational (logical, consistent)
B : Rational (logical, not self-contradictory)
14. O : Religious (having faith, devout)
B : Religious (having a good faith, devoting himself to religious activities)
15. O : Self-Controlled (self-disciplined, restrained)
B : Self-Controlled (self-disciplined, self-restraint)
16. O : Capable of Leadership (having initiative, leading people)
B : Having Leadership (initiative, leading people well)
17. O : Considerate (understanding, thoughtful)
B : Thoughtful (understanding, considerate)

Appendix 3COMPARISON BETWEEN THE ORIGINAL AND THE BACK-TRANSLATED VERSIONS
CONTD.

18. O : Helpful (co-operative, working for the welfare of others)
B : Helpful (co-operative, wanting to work for others)
19. O : Independent (self-reliant, self-sufficient)
B : Independent (not relying on others, self-sufficient)
20. O : Loving (affectionate, tender)
B : Affectionate (loving, soft)
21. O : Obedient (dutiful, respectful)
B : Obedient (dutiful, keeping one's own position as a junior)
22. O : Open-minded (broad-minded, tolerant)
B : Broad-minded (not biased, tolerant)
23. O : Pliable (flexible, adaptable)
B : Flexible (pliable, adaptable)
24. O : Polite (courteous, well-mannered)
B : Polite (courteous, having good manner)
25. O : Popular (well liked by others, attractive)
B : Popular (well liked by others, attractive)
26. O : Progressive (forward looking, innovative)
B : Progressive (looking forward, innovative)
27. O : Responsible (reliable, dependable)
B : Responsible (being trusted, dependable)
28. O : Self-revealing (self-disclosing, self-expressing)
B : Self-expressing (self-revealing, expressive)
29. O : Sociable (friendly, liking to meet people)
B : Sociable (kind, enjoying meeting people)
30. O : Successful (superior, achieving)
B : Successful (having superior feelings, achieving)

Appendix 4SCALE FOR RATING OCCUPATIONS IN THE KOREAN HIGH SCHOOL SAMPLES

<u>RATING</u>	<u>OCCUPATIONS</u>
1.	Cabinet Members, Members of Parliament, Diplomats, Professors, Medical Doctors, Lawyers, Dentists, Directors (large businesses), Company Managers. (income level - above ₩350.000 (\$700) a month in 1976).
2.	Accountants, Administrators of Public Service, Professional Engineers, Airline Pilots, Bank Branch Managers, University Lecturers, Principals of secondary and primary schools, Editors, Directors, (small business), Company or Departmental managers. (income level up to ₩350.000 (\$700)).
3.	Chemists, Clergymen, Secondary and Primary Teachers, Farmers (large scale), shop proprietors (large scale), Journalists, Social Workers, Office Managers (general), Section Chiefs (Public Service), Company or Departmental Managers. (income level up to ₩250.000 (\$500)).
4.	Office Clerks, Clerical Public Servants, Commercial Travellers, Builders (self employed), Electricians (s.e.), Motor Mechanics (s.e.), Watch-Makers (s.e.), Business Brokers, Shop-proprietors (medium scale), Farmers (medium scale), Hotel-proprietors and all skilled workers with their own business.
5.	Taxi Drivers (Truck), Barber, Butcher, Salesmen, Real Estate Agents, Bricklayer, Fitter, Carpenter, Painter, Paper-hanger, Factory Foreman, Shop-proprietors (small scale), Policemen, Dressmaker, Machine Operators, Farmers (small scale) and skilled workers (not self-employed) or semi-skilled workers.
6.	Porter, Construction Manual Workers, House-keepers, Packers, Factory Manual Workers, Shop-assistants, Guards, Road-sweepers, and unskilled labourers.



University of Canterbury Christchurch 1 New Zealand
Department of Psychology.

August, 1975.

Dear

The Psychology Department of the University of Canterbury is conducting a survey about the self concepts of university students, as part of a planned cross-cultural study.

The purpose of this letter is to ask for your personal co-operation in completing the enclosed questionnaire so that the study will be representative.

All information obtained from the questionnaire will be kept in strict confidence and used only for scientific purposes. The Students' Association has given its full support to this questionnaire.

Would you please return the questionnaire in the enclosed stamped and addressed envelope as soon as you have completed it. Your speedy co-operation will be much appreciated.

Yours sincerely,

S.M. HONG

Department of Psychology

Appendix 6

RELIABILITIES OF INDIVIDUAL QUESTION ITEMS OF THE SELF-CONCEPT QUESTIONNAIRE

ITEMS	PAST		PRESENT		FUTURE		IDEAL	
	NZ	KOR	NZ	KOR	NZ	KOR	NZ	KOR
Active	79*	63	89	85	73	68	81	7.78
Ambitious	74	52	82	80	82	76	80	84
Capable	81	27	85	45	68	74	84	73
Clean	85	58	83	72	75	73	90	60
Courageous	74	68	79	77	76	83	61	62
Creative	56	48	61	67	68	68	72	54
Healthy	76	71	79	76	70	64	85	56
Honest	69	68	77	82	82	81	66	60
Intelligent	64	75	53	82	58	62	75	58
Optimistic	53	61	85	54	87	58	67	47
Patient	84	36	91	64	92	66	73	60
Pleasant	61	49	75	68	73	52	62	57
Rational	67	65	84	45	82	60	75	63
Religious	78	36	92	74	94	66	87	68
Self-controlled	41	43	68	51	65	38	79	56
Leadership	88	69	94	87	93	66	79	78
Considerate	67	62	71	58	67	35	80	75
Helpful	42	50	42	74	41	52	72	67
Independent	70	71	67	72	70	40	72	66
Loving	66	80	57	68	62	62	80	47
Obedient	70	53	77	68	82	52	92	47
Open-minded	45	81	47	79	77	64	78	55
Pliable	47	51	65	57	76	32	82	32
Polite	72	64	84	76	87	53	84	44
Popular	81	72	87	78	80	47	87	68
Progressive	51	68	60	62	61	59	73	74
Responsible	72	52	79	47	75	57	75	73
Self-revealing	88	28	89	60	80	50	64	62
Sociable	67	41	71	71	71	51	53	48
Successful	60	57	79	82	81	70	70	77

* Decimal points have been dropped. N.Z. N=36, KOREA N=41

Appendix 7-1

MEANS AND STANDARD DEVIATIONS OF ACTUAL (PRESENT) SELF CONCEPTS FOR 12 KOREAN GROUPS (3E x 2K x 2R)

FACTOR E 1 1 1	X	H	ACTIVE	VARIABLE AMBIVIOUS	CAPABLE	CLEAN	COURAGEDUS	CREATIVE	HEALTHY	HONEST
99 OBS	M	SD	19.753 22.401	21.313 22.026	20.814 22.357	18.343 22.357	23.484 23.470	17.677 22.755	17.622 24.562	22.739 22.333
1 1 2	78 OBS	M	16.219 24.722	22.436 21.028	20.641 20.982	19.487 22.427	13.462 23.470	10.077 22.001	15.782 22.666	23.331
1 2 1	73 OBS	M	8.288 20.920	20.137 21.229	18.329 19.662	24.658 20.903	4.389 23.240	10.479 23.157	13.389 26.262	28.183
1 2 2	66 OBS	M	13.712 20.705	16.782 23.239	12.368 14.364	20.285 21.053	6.561 21.561	8.884 22.184	16.894 24.031	28.183
2 1 1	154 OBS	M	9.816 21.789	20.669 21.570	17.182 17.262	15.642 19.685	5.612 18.366	10.121 18.778	14.748 24.703	23.214 19.651
2 1 2	25 OBS	M	9.909 18.720	15.290 19.616	8.000 14.790	10.400 10.815	4.400 15.022	4.800 14.754	6.000 19.975	20.800 18.902
2 2 1	47 OBS	M	3.911 26.721	18.617 25.974	9.617 17.958	21.915 21.279	-1.702 23.296	4.468 20.910	21.170 25.457	27.021 20.341
2 2 2	34 OBS	M	6.912 20.598	13.824 19.582	7.794 14.883	18.559 22.237	-0.147 22.512	5.882 13.227	16.822 21.952	16.329 16.313
3 1 1	141 OBS	M	19.222 23.303	19.397 21.187	18.865 18.099	15.284 22.763	10.560 10.375	8.262 18.546	15.496 24.439	25.213 20.378
3 1 2	34 OBS	M	9.118 21.667	23.971 23.081	12.039 14.083	16.871 20.004	4.118 18.235	9.829 17.955	13.971 26.594	22.991 22.768
3 2 1	54 OBS	M	2.900 21.904	7.593 23.497	7.315 19.321	17.963 10.897	0.833 21.901	9.630 16.959	10.074 24.697	20.278 17.868
3 2 2	32 OBS	M	9.375 28.454	19.375 23.253	9.925 17.215	20.125 17.250	8.281 19.453	6.875 13.545	12.094 22.459	27.344 16.316

FACTOR E 1 1 1	X	H	INTELLIGENT	VARIABLE OPTIMISTIC	PATIENT	PLEASANT	RATIONAL	RELIGIOUS	SELF CONTROL	LEADERSHIP
99 OBS	M	SD	19.270 21.992	14.689 21.564	18.860 22.660	13.737 23.532	12.121 23.442	13.371 23.371	10.707 25.031	23.495 23.479
1 1 2	78 OBS	M	21.338 18.310	21.564 23.121	23.333 22.298	18.269 22.329	16.398 23.174	16.403 22.149	10.436 20.436	10.897 20.390
1 2 1	73 OBS	M	16.507 17.114	17.055 25.184	17.260 25.922	19.932 21.834	13.219 22.119	-12.260 21.661	6.233 24.235	1.664 24.651
1 2 2	66 OBS	M	13.780 18.157	19.318 24.774	17.388 22.220	20.879 23.489	11.521 17.892	11.258 23.663	19.129 24.129	13.333 23.300
2 1 1	154 OBS	M	16.888 16.564	19.195 23.982	19.649 22.692	10.292 20.708	12.328 18.718	-20.844 20.024	10.231 20.193	4.123 21.233
2 1 2	25 OBS	M	12.400 13.928	16.800 16.449	13.800 21.808	8.800 18.534	10.600 10.616	10.600 10.446	14.400 13.943	12.400 12.793
2 2 1	47 OBS	M	10.532 18.724	22.235 22.235	18.830 22.422	14.574 21.029	3.191 10.655	-20.868 23.323	8.733 23.323	23.088 23.088
2 2 2	34 OBS	M	9.706 13.908	11.471 17.967	29.118 16.212	9.653 20.430	11.324 18.517	9.853 18.687	12.647 18.391	-9.147 21.967
3 1 1	141 OBS	M	18.378 18.308	10.532 23.238	17.482 24.854	11.135 22.955	10.294 24.229	-20.638 23.379	11.738 23.543	5.709 21.352
3 1 2	34 OBS	M	9.812 13.908	17.299 23.982	22.353 21.884	11.618 20.827	6.912 15.076	16.812 20.445	19.265 20.694	19.793 19.793
3 2 1	54 OBS	M	19.333 18.333	19.133 23.133	14.333 23.333	18.733 22.733	10.133 18.133	-20.288 21.188	21.188 21.188	12.778 12.778
3 2 2	32 OBS	M	8.125 18.305	19.625 22.171	22.969 18.088	13.808 18.392	9.488 19.713	17.969 23.170	12.031 21.510	16.136 16.772

FACTOR E 1 1 1	X	H	CONSIDERAT	VARIABLE HELPFUL	INDEPENDEN	LOVING	OBLIGENT	OPEN-MIND	PLIABLE	POLITE
99 OBS	M	SD	20.355 19.796	21.788 20.887	19.727 22.272	17.333 23.142	13.232 23.694	12.576 20.976	13.980 21.684	18.778 21.204
1 1 2	78 OBS	M	21.282 18.464	21.026 20.566	17.179 21.840	21.731 19.253	16.795 23.271	13.205 23.047	18.077 22.767	22.244 18.687
1 2 1	73 OBS	M	18.288 23.858	16.916 21.963	19.805 22.960	14.630 21.119	12.603 25.442	8.493 28.367	8.904 23.203	13.151 13.374
1 2 2	66 OBS	M	20.682 20.623	21.212 18.136	19.227 21.730	19.848 19.968	15.758 23.308	10.985 18.402	10.500 20.745	13.839 13.836
2 1 1	154 OBS	M	17.488 17.357	21.236 18.080	18.045 20.192	18.277 22.277	12.061 22.061	9.221 18.543	12.370 18.696	19.090 19.090
2 1 2	25 OBS	M	13.900 14.930	20.800 12.639	11.400 17.649	17.800 17.800	10.900 25.125	12.000 18.028	9.800 17.808	20.800 18.807
2 2 1	47 OBS	M	22.838 18.732	17.234 18.674	19.309 21.805	12.128 18.368	13.191 21.403	11.566 22.044	9.787 24.603	22.233 18.313
2 2 2	34 OBS	M	18.178 18.062	17.298 15.238	14.929 19.934	20.430 20.430	13.088 17.189	7.741 15.132	22.387 22.387	13.391 13.391
3 1 1	141 OBS	M	22.227 19.255	19.078 21.446	19.417 21.382	13.262 21.892	13.369 23.138	20.205 20.998	19.886 20.502	19.886 19.886
3 1 2	34 OBS	M	19.187 18.181	21.618 19.374	18.311 22.311	18.715 18.715	23.805 23.805	16.711 16.711	19.886 19.886	19.793 19.793
3 2 1	54 OBS	M	10.219 18.118	13.333 20.486	19.000 21.490	17.328 21.328	22.547 22.547	18.589 18.589	18.216 18.216	19.844 19.844
3 2 2	32 OBS	M	17.813 15.105	20.313 19.395	23.750 23.750	13.888 13.888	13.388 21.097	21.097 13.888	13.888 13.888	19.888 19.888

FACTOR E 1 1 1	X	H	POPULAR	VARIABLE PROGRESSIVE	RESPONSIBLE	SELF-REVEAL	SOCIABLE	SUCCESSFUL
99 OBS	M	SD	7.925 22.342	13.879 21.716	25.909 18.876	3.990 23.904	3.535 23.258	15.859 23.701
1 1 2	78 OBS	M	17.949 20.430	17.115 23.084	23.333 21.084	13.141 27.107	16.090 22.830	16.141 24.747
1 2 1	73 OBS	M	7.755 22.901	8.082 21.932	21.151 21.154	6.753 20.907	9.219 20.445	20.890 23.279
1 2 2	66 OBS	M	11.697 21.711	7.803 20.904	19.813 21.113	4.031 23.404	13.730 22.687	13.885 22.239
2 1 1	154 OBS	M	7.760 18.436	19.335 17.552	25.000 19.306	5.449 22.373	6.558 21.070	16.396 20.830
2 1 2	25 OBS	M	7.400 17.103	9.800 17.229	11.800 16.250	7.200 21.461	4.000 14.930	17.800 17.265
2 2 1	47 OBS	M	0.957 18.986	2.872 20.871	23.083 16.667	-2.879 23.047	1.702 22.943	0.404 21.946
2 2 2	34 OBS	M	-0.294 16.234	1.618 18.411	17.794 17.675	2.353 24.748	-0.882 24.876	0.382 17.526
3 1 1	141 OBS	M	9.184 18.368	19.426 18.617	21.596 18.911	3.860 23.080	3.957 23.191	12.163 22.435
3 1 2	34 OBS	M	5.294 19.146	11.471 20.321	26.765 13.865	6.912 21.321	5.700 21.177	16.324 20.424
3 2 1	54 OBS	M	6.481 16.708	5.926 14.860	20.185 17.319	6.111 21.971	2.130 21.666	5.648 15.173
3 2 2	32 OBS	M	7.144 14.440	6.426 17.378	16.875 18.002	10.781 24.987	18.597 18.597	7.188 13.447

Key For Factor	
(1 1 1)	HS-M-NB
(1 1 2)	HS-M-XN
(1 2 1)	HS-F-NB
(1 2 2)	HS-F-XN
(2 1 1)	JU-M-NB
(2 1 2)	JU-M-XN
(2 2 1)	JU-F-NB
(2 2 2)	JU-F-XN
(3 1 1)	SU-M-NB
(3 1 2)	SU-M-XN
(3 2 1)	SU-F-NB
(3 2 2)	SU-F-XN

Appendix 7-2

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR EDUCATIONAL LEVEL (E) : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	UFERR	P LESS THAN	R
1 THROUGH 2	2.161	60.000	1592.000	0.001	0.347
2 THROUGH 2	0.786	29.000	796.500	0.784	0.167

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	2.635	1331.488	0.072	-0.081	
AMBITIOUS	1.733	840.619	0.177	-0.094	
CAPABLE	5.959	2808.889	0.003	0.107	
CLEAN	2.054	910.576	0.129	0.117	
COURAGEOUS	4.596	2019.278	0.010	0.053	
CREATIVE	9.221	3482.569	0.001	0.273	
HEALTHY	1.249	742.970	0.287	0.121	
HONEST	0.525	227.132	0.592	-0.245	
INTELLIGENT	4.722	1549.788	0.009	-0.013	
OPTIMISTIC	10.352	5680.923	0.001	0.209	
PATIENT	0.099	53.788	0.906	-0.045	
PLEASANT	8.964	4299.536	0.001	0.172	
RATIONAL	2.544	1100.817	0.079	0.049	
RELIGIOUS	31.615	20479.533	0.001	0.746	
SELF-CONTROL	0.373	177.803	0.689	-0.267	
LEADERSHIP	3.812	1800.045	0.022	0.056	
CONSIDERATE	0.595	212.921	0.552	-0.089	
HUMILFUL	0.812	302.038	0.444	0.011	
INDEPENDENT	0.549	257.904	0.570	-0.007	
LOVING	2.186	911.011	0.113	-0.001	
OBEIENT	0.509	271.449	0.601	-0.034	
OPEN-MIND	0.542	220.414	0.582	-0.129	
PLIABLE	3.036	1315.751	0.049	-0.092	
POLITE	0.876	293.005	0.417	0.019	
POPULAR	7.007	2643.200	0.001	0.200	
PROGRESSIVE	3.611	1396.832	0.027	0.012	
RESPONSIBLE	0.118	40.548	0.888	-0.057	
SELF-REVEAL	1.409	796.269	0.245	-0.206	
SOCIABLE	4.621	2427.404	0.010	-0.003	
SUCCESSFUL	6.238	2877.066	0.002	0.117	

DISCRIMINANT SCORES

CONTRAST	1
1	0.356
2	-0.264

Appendix 7-3

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR SEX (X) : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	3.111	30.000	796.000	0.001	0.324

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	5.386	2721.192	0.021	0.004	
AMBITIOUS	11.328	5493.294	0.001	0.066	
CAPABLE	18.709	6306.858	0.001	0.274	
CLEAN	9.491	4207.520	0.002	-0.492	
COURAGEOUS	10.913	4794.383	0.001	0.139	
CREATIVE	10.559	3987.630	0.001	0.090	
HEALTHY	0.865	514.797	0.353	-0.125	
HONEST	0.110	47.780	0.740	-0.030	
INTELLIGENT	7.469	2451.149	0.006	0.176	
OPTIMISTIC	0.073	40.069	0.787	0.032	
PATIENT	0.059	31.890	0.809	-0.136	
PLEASANT	4.110	1971.193	0.043	-0.399	
RATIONAL	1.814	785.014	0.178	-0.010	
RELIGIOUS	3.464	2243.932	0.063	-0.354	
SELF-CONTROL	4.795	2283.811	0.029	0.130	
LEADERSHIP	8.216	3879.184	0.004	0.073	
CONSIDERATE	3.124	1118.005	0.078	0.037	
HELPFUL	5.483	2039.191	0.019	0.138	
INDEPENDENT	4.224	1984.836	0.040	-0.093	
LOVING	8.025	3344.893	0.005	0.332	
ORDERLY	0.539	287.167	0.463	0.087	
OPEN-MINDED	3.727	1515.693	0.054	0.041	
PLIABLE	5.287	2291.368	0.022	0.003	
POLITE	0.002	0.560	0.967	-0.226	
POPULAR	5.232	1973.785	0.022	0.093	
PROGRESSIVE	21.952	8490.474	0.001	0.393	
RESPONSIBLE	3.746	1282.261	0.053	0.034	
SELF-REVEALING	0.760	429.499	0.384	-0.154	
SOCIABLE	0.321	168.859	0.571	-0.041	
SUCCESSFUL	7.376	3401.926	0.007	0.118	

DISCRIMINANT SCORES

CONTRAST

1	0.316
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Appendix 7-4

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR RELIGION (R) : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	10.993	30.000	796.000	0.001	0.541

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	3.829	1934.374	0.051	-0.153	
AMBITIOUS	0.011	5.421	0.916	0.025	
CAPABLE	0.009	2.998	0.925	0.059	
CLEAN	0.152	67.513	0.696	-0.014	
COURAGEDUS	1.421	624.183	0.234	0.080	
CREATIVE	0.791	298.910	0.374	0.076	
HEALTHY	0.032	18.766	0.859	-0.008	
HONEST	0.090	38.792	0.765	0.059	
INTELLIGENT	1.308	429.390	0.253	0.085	
OPTIMISTIC	3.494	1917.392	0.062	-0.045	
PATIENT	7.711	4189.933	0.006	-0.115	
PLEASANT	0.098	46.872	0.759	0.135	
RATIONAL	0.088	37.909	0.767	0.081	
RELIGIOUS	281.616	182424.227	0.001	-0.994	
SELF CONTRD	6.212	2958.409	0.011	-0.030	
LEADERSHIP	11.132	5256.107	0.001	-0.159	
CONSIDERAT	0.304	108.663	0.582	0.126	
HELPFUL	1.460	543.062	0.227	-0.109	
INDEPENDEN	4.434	2083.716	0.036	0.148	
LOVING	1.461	609.872	0.227	-0.044	
ORIENTNT	0.591	314.912	0.442	0.081	
OPEN-MIND	0.447	181.599	0.504	0.149	
PLIABLE	0.055	23.860	0.815	-0.019	
POLITE	0.195	65.267	0.659	-0.091	
POPULAR	4.974	1876.270	0.026	-0.046	
PROGRESSIVE	0.276	106.902	0.599	0.081	
RESPONSBLE	0.003	1.091	0.955	-0.022	
SELF-REVEAL	4.580	2577.126	0.031	-0.032	
SOCIABLE	4.989	2620.814	0.026	0.044	
SUCCESSFUL	0.043	19.915	0.835	0.027	

DISCRIMINANT SCORES
CONTRAST

1
0.743

Appendix 7-5

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR EDUCATIONAL LEVEL X SEX : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	1.592	60.000	1592.000	0.003	0.267
2 THROUGH 2	1.202	29.000	796.500	0.215	0.205

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.618	312.069	0.539	0.050	
AMBITIOUS	1.966	953.473	0.141	0.247	
CAPABLE	0.318	107.354	0.727	0.007	
CLEAN	0.371	164.371	0.690	0.043	
COURAGEOUS	0.651	285.972	0.522	-0.293	
CREATIVE	1.450	1302.985	0.032	-0.439	
HEALTHY	3.356	1996.256	0.035	-0.139	
HONEST	0.187	81.001	0.829	0.195	
INTELLIGENT	0.967	317.393	0.381	-0.222	
OPTIMISTIC	0.204	111.837	0.816	-0.036	
PATIENT	1.640	890.980	0.195	0.066	
PLEASANT	0.342	164.118	0.710	0.139	
RATIONAL	1.091	471.822	0.337	-0.095	
REFLIGIOUS	0.230	148.699	0.795	0.060	
SELF-CONTROL	0.291	138.733	0.747	-0.166	
LEADERSHIP	4.725	2231.079	0.009	0.705	
CONSIDERATE	0.307	109.874	0.736	-0.011	
HFLPFUL	0.180	66.768	0.836	-0.023	
INDEPENDENT	0.255	119.678	0.775	0.258	
LOVING	0.254	105.799	0.776	0.057	
OBEDIENT	0.107	57.063	0.898	-0.093	
OPEN-MIND	1.199	487.436	0.302	-0.111	
PLIABLE	0.128	55.582	0.880	-0.106	
POLITE	2.432	613.306	0.089	0.437	
POPULAR	2.206	832.327	0.111	-0.051	
PROGRESSIVE	0.501	193.769	0.606	-0.216	
RESPONSIBLE	0.858	293.641	0.424	-0.389	
SELF-REVEAL	3.253	1838.337	0.039	-0.432	
SOCIABLE	2.284	1199.682	0.103	0.010	
SUCCESSFUL	3.225	1487.454	0.040	0.406	

DISCRIMINANT SCORES

CONTRAST	1
1	-0.322
2	-0.055

Appendix 7-6

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR EDUCATIONAL LEVEL X RELIGION : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	1.379	60.000	1592.000	0.031	0.263
2 THROUGH 2	0.632	29.000	796.500	0.720	0.171

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC 2, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.687	346.873	0.504	-0.115	
AMBITIOUS	2.667	1293.211	0.070	0.252	
CAPABLE	1.382	465.810	0.252	-0.104	
CLEAN	2.048	907.954	0.130	0.036	
COURAGEOUS	0.300	131.613	0.741	0.099	
CREATIVE	0.231	87.128	0.794	0.004	
HEALTHY	0.381	226.456	0.684	-0.040	
HONEST	2.317	1002.566	0.099	0.027	
INFLUENT	2.125	697.271	0.120	-0.269	
OPTIMISTIC	0.552	302.674	0.576	-0.002	
PATIENT	0.709	385.377	0.492	0.043	
PLEASANT	1.396	669.661	0.248	0.019	
RATIONAL	0.595	257.446	0.552	-0.049	
RELIGIOUS	4.307	2789.865	0.014	0.517	
SELF-CONTROL	0.829	394.900	0.437	-0.250	
LEADERSHIP	2.041	963.242	0.130	-0.096	
CONSIDERATE	1.095	391.767	0.335	-0.169	
HELPFUL	0.678	251.965	0.508	0.179	
INDEPENDENT	1.575	740.731	0.208	-0.369	
LOVING	1.399	583.078	0.247	-0.041	
OBEDIENT	0.864	460.230	0.422	-0.206	
OPEN-MIND	0.104	42.349	0.901	0.237	
PLIABLE	4.629	2006.510	0.010	-0.359	
POLITE	1.263	422.321	0.283	0.124	
POPULAR	6.088	2296.746	0.002	-0.433	
PROGRESSIVE	0.228	68.089	0.796	0.090	
RESPONSIBLE	3.686	1261.890	0.025	0.356	
SELF-REVEAL	0.026	14.718	0.974	0.212	
SOCIABLE	3.342	1755.455	0.036	-0.159	
SUCCESSFUL	0.842	388.546	0.431	0.274	

DISCRIMINANT SCORES

CONTRAST	1
1	0.375
2	-0.043

Appendix 7-7

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR SEX X RELIGION : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.601	30.000	796.000	0.956	0.149

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.805	406.627	0.370	-0.322	
AMBITIOUS	0.151	73.165	0.698	0.060	
CAPABLE	0.070	23.564	0.792	0.036	
CLEAN	1.780	789.158	0.182	0.259	
COURAGEOUS	0.617	270.996	0.432	-0.197	
CREATIVE	0.075	28.376	0.784	-0.086	
HEALTHY	0.120	71.521	0.729	0.079	
HONEST	0.217	93.856	0.640	0.204	
INTELLIGENT	1.143	375.057	0.285	0.172	
OPTIMISTIC	0.318	174.261	0.573	0.072	
PATIENT	0.014	7.363	0.904	0.023	
PLEASANT	0.241	115.697	0.623	0.166	
RATIONAL	0.104	45.174	0.747	-0.156	
RELIGIOUS	0.096	62.258	0.757	0.056	
SELF CONTROL	0.031	14.942	0.859	0.059	
LEADERSHIP	0.871	411.044	0.351	-0.174	
CONSIDERATE	0.208	74.276	0.649	0.212	
HELPFUL	1.534	570.480	0.216	0.274	
INDEPENDENT	0.596	280.301	0.440	0.291	
LOVING	0.015	6.192	0.903	0.145	
CREDIBLE	0.345	183.585	0.557	-0.262	
OPEN-MINDED	0.041	16.519	0.840	0.161	
PLIABLE	1.128	489.042	0.288	0.501	
POLITE	0.512	171.313	0.474	0.203	
POPULAR	0.009	3.453	0.924	0.081	
PROGRESSIVE	0.422	163.084	0.516	0.327	
RESPONSIBLE	0.112	38.324	0.738	-0.125	
SELF-REVEALING	1.243	702.304	0.269	0.377	
SOCIABLE	0.145	76.007	0.704	0.011	
SUCCESSFUL	2.837	1308.562	0.092	0.449	

Appendix 7-8

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR (E) x (R) x (X) : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	0.894	60.000	1592.000	0.704	0.185
2 THROUGH 2	0.879	29.000	796.500	0.652	0.176

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F (2, 825)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.616	311.048	0.541	0.006	
AMBITIOUS	0.394	190.990	0.675	0.031	
CAPABLE	0.715	240.975	0.490	-0.154	
CLEAN	0.868	384.820	0.420	-0.081	
COURAGEOUS	1.177	517.139	0.309	0.040	
CREATIVE	0.800	302.116	0.450	-0.261	
HEALTHY	0.071	42.469	0.931	-0.073	
HONEST	2.292	991.571	0.102	0.169	
INTELLIGENT	1.228	402.922	0.293	-0.264	
OPTIMISTIC	1.164	638.657	0.313	-0.359	
PATIENT	2.132	1158.775	0.119	-0.485	
PLEASANT	0.169	81.144	0.844	0.264	
RATIONAL	2.489	1076.712	0.084	-0.436	
RELIGIOUS	0.949	614.996	0.387	-0.072	
SELFCONTRD	0.154	73.489	0.857	-0.014	
LEADERSHIP	0.094	44.291	0.910	0.122	
CONSIDERAT	1.970	705.007	0.140	0.265	
HELPFUL	0.206	76.772	0.814	0.016	
INDEPENDEN	0.282	132.368	0.755	0.184	
LOVING	0.146	60.845	0.864	-0.077	
CREDIFNT	0.217	115.642	0.805	-0.228	
OPEN-MIND	0.922	375.025	0.398	0.362	
PLIABLE	0.904	391.770	0.405	0.218	
POLITE	1.281	428.288	0.278	0.309	
POPULAR	0.563	212.471	0.570	0.101	
PROGRESSIVE	0.110	42.424	0.896	0.055	
RESPONSIBLE	0.193	65.997	0.825	-0.151	
SELF-REVEAL	1.605	907.187	0.201	-0.329	
SOCIALBLE	2.385	1252.962	0.093	-0.246	
SUCCESSFUL	0.656	302.449	0.519	0.028	

Appendix 8-2

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR EDUCATIONAL LEVEL (E) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	3.527	60.000	1804.000	0.001	0.426
2 THROUGH 2	0.670	29.000	972.500	0.907	0.145

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 931)	MEAN SQ	P LESS THAN	1	
ACTIVE	15.004	5144.835	0.001	0.175	
AMBITIOUS	1.395	503.203	0.248	0.015	
CAPABLE	0.887	206.479	0.412	-0.343	
CLEAN	36.072	13122.265	0.001	-0.648	
COURAGEOUS	2.455	870.087	0.086	-0.048	
CREATIVE	0.677	249.495	0.509	-0.133	
HEALTHY	16.214	6223.487	0.001	0.233	
HONEST	0.661	221.868	0.517	-0.286	
INTELLIGENT	1.923	448.788	0.147	-0.085	
OPTIMISTIC	2.105	808.814	0.122	-0.100	
PATIENT	1.240	535.615	0.290	-0.110	
PLEASANT	9.430	2703.275	0.001	0.046	
RATIONAL	0.432	133.531	0.649	0.102	
RELIGIOUS	3.402	2506.449	0.034	0.281	
SELF-CONTROL	4.115	1532.320	0.017	-0.105	
LEADERSHIP	6.663	2825.615	0.001	-0.101	
CONSIDERATE	0.700	177.990	0.497	-0.239	
HELPFUL	1.636	427.744	0.195	0.002	
INDEPENDENT	0.242	89.887	0.785	-0.052	
LOVING	8.999	3146.232	0.001	0.060	
ORIENTED	2.364	841.222	0.095	-0.041	
OPEN-MINDED	3.090	979.906	0.046	0.120	
PLIABLE	2.934	945.219	0.054	0.012	
POLITE	14.880	4282.861	0.001	0.247	
POPULAR	15.473	4088.969	0.001	0.046	
PROGRESSIVE	4.966	1178.553	0.007	0.090	
RESPONSIBLE	2.640	728.153	0.072	-0.057	
SELF-REVEALING	7.545	3448.063	0.001	0.053	
SOCIABLE	30.656	11401.988	0.001	0.369	
SUCCESSFUL	2.441	658.416	0.088	-0.156	

DISCRIMINANT SCORES

CONTRAST	1
1	0.608
2	-0.347

Appendix 8-3

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR SEX (X) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	7.332	30.000	902.000	0.001	0.443

VARIABLE	UNIVARIATE F TESTS				STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F (1, 931)	MEAN SQ	P LESS THAN		1	
ACTIVE	18.084	4201.016	0.001		-0.282	
AMBITIOUS	2.287	824.873	0.131		0.195	
CAPABLE	0.003	0.618	0.959		0.090	
CLEAN	13.072	4755.498	0.001		-0.361	
COURAGEDUS	3.284	896.397	0.070		-0.031	
CREATIVE	0.356	131.300	0.551		0.059	
HEALTHY	24.282	9319.966	0.001		-0.239	
HONEST	0.001	0.393	0.973		-0.115	
INTELLIGENT	2.024	472.354	0.155		-0.008	
OPTIMISTIC	0.113	43.582	0.736		-0.008	
PATIENT	0.010	4.363	0.920		0.094	
PLEASANT	5.764	1652.312	0.017		-0.258	
RATIONAL	36.227	11192.777	0.001		-0.428	
RELIGIOUS	10.729	7903.646	0.001		0.257	
SELF-CONTROL	14.549	5417.707	0.001		-0.302	
LEADERSHIP	24.398	9064.410	0.001		-0.399	
CONSIDERATE	0.498	126.563	0.481		-0.147	
HELPFUL	12.745	3332.758	0.001		0.378	
INDEPENDENT	0.679	252.026	0.410		0.014	
LIVING	12.599	4404.838	0.001		-0.228	
ORDERLY	0.022	7.740	0.883		-0.150	
OPEN-MIND	1.018	322.698	0.313		0.084	
POLITE	2.754	886.980	0.097		0.187	
POPULAR	0.266	77.177	0.606		-0.193	
PROGRESSIVE	0.784	207.129	0.376		-0.177	
RESPONSIBLE	1.647	390.895	0.200		-0.060	
SELF-REVEAL	0.295	81.343	0.587		0.128	
SOCIABLE	0.003	1.364	0.956		-0.114	
SUCCESSFUL	12.924	4806.741	0.001		0.286	
	3.866	1042.925	0.050		0.004	

DISCRIMINANT SCORES
CONTRAST

1
-0.525

Appendix 8-4

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR RELIGION (R) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	8.791	30.000	902.000	0.001	0.476

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F (1, 931)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.202	69.185	0.653	-0.010	
AMBITIOUS	18.307	6601.777	0.001	0.239	
CAPABLE	3.390	789.249	0.066	0.050	
CLEAN	15.078	5884.920	0.001	0.120	
COURAGEOUS	2.518	687.293	0.113	0.065	
CREATIVE	0.639	235.663	0.424	-0.075	
HEALTHY	0.070	26.854	0.791	-0.051	
HONEST	12.036	4040.124	0.001	-0.010	
INTELLIGENT	1.768	412.496	0.184	-0.115	
OPTIMISTIC	6.578	2527.952	0.010	0.050	
PATIENT	10.363	4485.204	0.001	-0.006	
PLEASANT	13.800	3955.719	0.001	0.124	
RATIONAL	0.133	40.992	0.716	0.053	
RELIGIOUS	196.124	144481.071	0.001	0.804	
SELF-CONTROL	1.154	429.551	0.283	-0.165	
LEADERSHIP	11.326	4207.942	0.001	0.125	
CONSIDERATE	1.839	467.315	0.175	-0.146	
HELPEFUL	12.208	3192.414	0.001	0.056	
INDEPENDENT	4.070	1512.111	0.044	-0.092	
LIVING	0.466	162.751	0.495	-0.168	
WREATHENT	33.959	12090.241	0.001	0.119	
OPEN-MIND	7.471	2368.875	0.006	-0.040	
PIABLE	1.763	567.787	0.185	-0.088	
POLITE	19.869	5766.914	0.001	0.200	
POPULAR	2.819	744.938	0.093	-0.011	
PROGRESSIVE	0.619	146.810	0.432	-0.162	
RESPONSIBLE	8.811	2430.062	0.003	0.075	
SELF-REVEAL	5.859	2677.471	0.016	0.080	
SOCIABLE	6.111	2272.846	0.014	0.106	
SUCCESSFUL	0.525	141.509	0.469	-0.145	

DISCRIMINANT SCORES

CONTRAST	1
1	-0.553

Appendix 8-5

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR EDUCATIONAL LEVEL X SEX : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	1.152	60.000	1804.000	0.202	0.215
2 THROUGH 2	0.875	29.000	902.500	0.657	0.165

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F (2, 931)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.356	122.201	0.700	0.231	
AMBITIOUS	0.595	214.614	0.552	0.241	
CAPABLE	0.690	169.562	0.502	-0.214	
CLEAN	1.784	648.882	0.169	0.021	
COURAGEOUS	0.617	168.472	0.540	0.226	
CREATIVE	0.616	227.149	0.540	-0.165	
HEALTHY	0.184	70.508	0.632	-0.086	
HONEST	2.567	861.682	0.077	-0.120	
INTELLIGENT	0.743	173.273	0.476	0.277	
OPTIMISTIC	2.573	988.983	0.077	-0.206	
PATIENT	2.724	1178.766	0.066	-0.253	
PLEASANT	1.199	343.681	0.302	-0.046	
RATIONAL	1.215	375.493	0.297	-0.136	
RELIGIOUS	1.080	795.340	0.340	-0.031	
SELF CONTROL	0.094	35.034	0.910	0.190	
LEADERSHIP	0.664	246.823	0.515	-0.099	
CONSIDERATE	0.387	98.250	0.679	0.336	
HELPFUL	2.918	763.164	0.055	-0.384	
INDEPENDENT	0.566	210.124	0.568	-0.220	
LOVING	0.437	152.756	0.646	0.071	
ORDERLY	2.070	737.130	0.127	-0.178	
OPEN-MIND	1.425	451.757	0.241	0.291	
PLIABLE	0.898	289.304	0.408	0.400	
POLITE	1.630	473.013	0.197	-0.294	
POPULAR	0.390	103.092	0.677	0.128	
PROGRESSIVE	2.247	533.296	0.106	-0.468	
RESPONSIBLE	0.240	66.116	0.787	0.241	
SELF-REVEAL	0.269	122.888	0.764	0.124	
SOCIAL	2.432	904.439	0.088	-0.387	
SUCCESSFUL	1.386	373.751	0.251	0.177	

Appendix 8-6

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR EDUCATIONAL LEVEL X RELIGION : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	0.975	60.000	1804.000	0.531	0.199
2 THROUGH 2	0.743	29.000	902.500	0.835	0.153

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 931)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.570	195.289	0.566	0.075	
AMBITIOUS	0.483	174.190	0.617	0.287	
CAPABLE	0.995	231.646	0.310	-0.405	
CLEAN	0.043	15.571	0.958	0.109	
COURAGEDUS	1.842	502.940	0.159	0.147	
CREATIVE	0.793	292.390	0.453	0.192	
HEALTHY	0.577	221.529	0.363	0.151	
HONEST	0.602	222.200	0.548	0.044	
INTELLIGENT	1.827	426.271	0.163	-0.034	
OPTIMISTIC	1.478	368.002	0.229	0.212	
PATIENT	0.960	415.606	0.343	0.412	
PLEASANT	0.038	10.991	0.963	0.126	
RATIONAL	0.172	52.158	0.863	-0.003	
RELIGIOUS	0.239	176.142	0.787	0.113	
SELFCONTROL	4.073	1516.699	0.017	-0.660	
LEADERSHIP	1.167	433.511	0.281	-0.114	
CONSIDERAT	0.658	167.539	0.518	-0.031	
HELPFUL	0.859	224.530	0.424	-0.112	
INDEPENDEN	1.155	429.271	0.315	0.131	
LOVING	0.452	158.126	0.636	-0.274	
CREDIENT	0.006	2.017	0.998	0.171	
OPEN-MIND	0.873	276.848	0.418	0.373	
PLIABLE	0.441	141.915	0.644	-0.226	
POLITE	1.293	375.368	0.275	-0.282	
POPULAR	1.835	484.855	0.160	-0.059	
PROGRESSIVE	0.358	84.917	0.699	-0.094	
RESPONSIBLE	0.812	224.049	0.444	-0.144	
SELF-REVEAL	0.062	28.427	0.940	0.051	
SOCIABLE	1.061	364.720	0.346	-0.058	
SUCCESSFUL	0.590	159.106	0.555	0.176	

Appendix 8-7

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR SEX X RELIGION : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	0.651	30.000	902.000	0.926	0.146

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 931)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.446	153.035	0.504	-0.203	
AMBITIOUS	1.501	541.331	0.221	-0.475	
CAPABLE	0.023	5.279	0.880	-0.244	
CLEAN	0.040	14.617	0.841	-0.003	
COURAGEOUS	2.259	616.559	0.133	0.437	
CREATIVE	1.646	606.965	0.200	0.251	
HEALTHY	1.865	715.974	0.172	-0.371	
HONEST	0.094	31.419	0.760	0.155	
INTELLIGENT	0.825	162.635	0.364	0.389	
OPTIMISTIC	0.019	7.301	0.890	0.034	
PATIENT	2.720	1177.053	0.099	-0.431	
PLEASANT	0.046	13.208	0.830	-0.167	
RATIONAL	0.491	151.692	0.484	-0.066	
RELIGIOUS	0.041	10.464	0.839	-0.080	
SELF-CONTROL	0.681	253.772	0.409	-0.120	
LEADERSHIP	0.027	10.132	0.869	0.033	
CONSIDERATE	0.002	0.533	0.963	-0.112	
HELPFUL	0.468	122.396	0.494	0.230	
INDEPENDENT	0.044	16.485	0.833	-0.037	
LIVING	0.267	93.183	0.606	-0.036	
ORIENTED	0.036	12.915	0.849	0.093	
OPEN-MIND	0.019	6.052	0.890	-0.117	
PLIABLE	0.038	12.123	0.846	0.117	
POLITE	0.045	13.057	0.832	0.013	
POPULAR	0.674	178.207	0.412	0.236	
PROGRESSIVE	0.049	11.706	0.824	-0.287	
RESPONSIBLE	0.021	5.795	0.885	0.054	
SELF-REVEAL	0.011	5.092	0.916	-0.062	
SOCIABLE	1.213	451.324	0.271	-0.364	
SUCCESSFUL	0.062	16.715	0.803	-0.314	

Appendix 8-8

UNIVARIATE F TESTS OF ACTUAL (PRESENT) SELF CONCEPTS FOR (E) x (R) x (X) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	0.722	60.000	1804.000	0.947	0.163
2 THROUGH 2	0.645	29.000	902.500	0.926	0.143

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 931)	MEAN SD	P LESS THAN	1	
ACTIVE	0.243	83.485	0.784	0.008	
AMBITIOUS	0.803	290.249	0.447	-0.255	
CAPABLE	0.435	101.312	0.647	-0.345	
CLEAN	0.172	62.390	0.842	0.116	
COURAGEOUS	1.942	530.116	0.144	0.397	
CREATIVE	0.457	168.544	0.633	-0.201	
HEALTHY	0.812	311.544	0.444	-0.203	
HONEST	1.106	371.325	0.331	-0.353	
INTFLIGENT	0.289	67.388	0.749	0.134	
OPTIMISTIC	0.015	5.728	0.985	0.026	
PATIENT	0.983	425.573	0.374	-0.087	
PLEASANT	0.509	145.947	0.601	0.087	
RATIONAL	1.061	327.819	0.347	0.204	
REFLIGIOUS	0.067	49.012	0.936	0.082	
SELFCONTROL	0.324	120.543	0.724	0.206	
LEADERSHIP	0.361	134.032	0.697	0.119	
CONSIDERATE	0.041	10.293	0.960	-0.190	
HELPFUL	0.156	40.858	0.855	0.200	
INDEPENDENT	0.050	18.707	0.951	0.071	
LOVING	1.617	565.319	0.199	0.283	
OBEDIENT	0.173	61.733	0.841	-0.212	
OPEN-MIND	0.053	16.682	0.949	0.157	
PLIABLE	0.148	47.719	0.862	-0.031	
POLITE	1.232	357.623	0.292	0.654	
POPULAR	0.052	13.701	0.949	-0.412	
PROGRESSIVE	0.063	14.864	0.939	-0.083	
RESPONSIBLE	0.561	154.816	0.571	-0.288	
SELF-REVEAL	0.837	362.519	0.433	0.382	
SOCIABLE	0.074	27.366	0.929	0.138	
SUCCESSFUL	0.377	101.814	0.686	0.307	

Appendix 9-2

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR EDUCATIONAL LEVEL (E) : KOREA

TEST OF E

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DF NUM	DF DEN	P LESS THAN	R
1 THROUGH 1	1.646	30.000	484.000	0.018	0.304

UNIVARIATE F TESTS

STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS

VARIABLE	F(1, 513)	MEAN SQ	P LESS THAN	
ACTIVE	0.270	84.970	0.604	-0.099
AMBITIOUS	0.052	15.773	0.821	0.091
CAPABLE	1.509	445.488	0.220	0.540
CLEAN	3.553	1315.124	0.060	0.170
COURAGEOUS	6.897	2239.098	0.009	-0.820
CREATIVE	0.442	144.254	0.507	0.204
HEALTHY	0.002	0.721	0.965	-0.072
HONEST	0.945	359.537	0.332	0.011
INTELLIGENT	0.781	259.341	0.377	-0.027
OPTIMISTIC	0.022	0.134	0.881	-0.062
PATIENT	0.024	7.566	0.877	-0.037
PLEASANT	2.544	884.724	0.111	0.254
RATIONAL	0.091	29.245	0.763	-0.104
RELIGIOUS	10.816	5625.229	0.001	0.494
SELF-CONTROL	0.002	0.608	0.965	-0.057
LEADERSHIP	2.011	743.142	0.157	-0.425
CONSIDERATE	1.437	391.367	0.231	0.221
HELPFUL	1.891	571.856	0.170	0.103
INDEPENDENT	0.671	217.430	0.413	0.092
LOVING	4.848	1765.376	0.028	0.221
DEPENDENT	1.564	736.764	0.212	0.019
OPEN-MIND	0.008	3.012	0.927	-0.111
PLIABLE	0.018	5.663	0.895	-0.042
POLITE	0.620	211.730	0.431	-0.174
POPULAR	0.637	207.759	0.425	0.114
PROGRESSIVE	0.311	109.182	0.577	-0.136
RESPONSIBLE	0.407	124.236	0.524	0.307
SELF-REVEAL	0.011	4.335	0.917	-0.035
SOCIABLE	0.115	40.361	0.735	-0.032
SUCCESSFUL	0.046	16.867	0.830	-0.233

DISCRIMINANT SCORES

CONTRAST

1
-0.245

Appendix 9-3

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR SEX (X) : KOREA

TEST OF X

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS
 TEST OF ROOTS F D.F. HYP D.F. ERR P LESS THAN R
 1 THROUGH 1 2.841 30.000 484.000 0.001 0.387

VARIABLE	UNIVARIATE F TESTS				STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC 1	513	MEAN SQ	P LESS THAN	1	
ACTIVE	18.366	5790.319	0.001	0.001	0.058	
AMBITIOUS	25.336	7759.622	0.001	0.001	0.248	
CAPABLE	12.789	3775.298	0.001	0.001	-0.033	
CLEAN	0.329	121.794	0.566	0.566	-0.288	
COURAGEOUS	34.252	11128.687	0.001	0.001	-0.552	
CREATIVE	2.681	875.346	0.102	0.102	-0.345	
HEALTHY	7.006	2693.582	0.006	0.006	0.171	
HONEST	2.460	936.386	0.117	0.117	-0.062	
INTELLIGENT	5.921	1965.584	0.015	0.015	-0.068	
OPTIMISTIC	7.227	2960.596	0.007	0.007	0.173	
PATIENT	8.339	2611.082	0.008	0.008	0.023	
PLEASANT	0.782	271.846	0.377	0.377	-0.271	
RATIONAL	12.976	6112.338	0.001	0.001	-0.347	
REFUGIOUS	1.884	979.768	0.170	0.170	-0.232	
SELF CONTROL	4.609	1473.172	0.032	0.032	-0.126	
LEADERSHIP	17.787	6373.861	0.001	0.001	-0.189	
CONSIDERATE	2.013	548.457	0.124	0.124	-0.241	
HELPFUL	3.586	1082.873	0.059	0.059	0.101	
INDEPENDENT	6.987	2264.260	0.008	0.008	0.022	
LOVING	0.028	10.121	0.868	0.868	-0.070	
ORGIDENT	1.925	906.794	0.166	0.166	-0.246	
OPEN MIND	6.220	2243.562	0.013	0.013	0.165	
PITABLE	3.085	993.658	0.080	0.080	-0.147	
POLITE	0.638	217.826	0.429	0.429	-0.069	
POPULAR	9.397	3065.100	0.002	0.002	0.265	
PROGRESSIVE	15.124	5334.060	0.001	0.001	-0.001	
RESPONSIBLE	9.378	2864.859	0.002	0.002	-0.019	
SELF REVEAL	2.263	896.691	0.133	0.133	-0.185	
SOCIABLE	5.786	2028.700	0.018	0.018	-0.007	
SUCCESSFUL	17.575	6432.860	0.001	0.001	0.351	

DISCRIMINANT SCORES

CONTRAST

1

1
0.395

Appendix 9-4

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR RELIGION (R) : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	4.210	30.000	484.000	0.001	0.455

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC 1, 513)	MEAN 50	P LESS THAN	1	
ACTIVE	0.0005	1.671	0.942	-0.046	
AMBITIOUS	0.394	120.547	0.531	-0.007	
CAPABLE	0.120	35.544	0.729	0.133	
CLEAN	0.0005	1.975	0.942	0.047	
COURAGEOUS	0.0001	0.218	0.979	-0.084	
CREATIVE	0.300	98.101	0.584	-0.002	
HEALTHY	3.497	1344.422	0.062	-0.248	
HONEST	0.162	61.527	0.658	0.243	
INTELLIGENT	2.547	845.649	0.111	-0.387	
OPTIMISTIC	1.511	619.133	0.219	-0.101	
PATIENT	0.019	5.913	0.891	0.084	
PLEASANT	0.006	1.932	0.941	-0.081	
RATIONAL	0.270	86.871	0.604	0.129	
RELIGIOUS	78.306	40726.362	0.001	0.888	
SELF CONTROL	2.897	924.902	0.089	0.108	
LEADERSHIP	0.737	272.350	0.391	0.220	
CONSIDERATE	0.693	188.765	0.406	-0.161	
HELPFUL	0.316	95.542	0.574	0.029	
INDEPENDENT	0.292	94.792	0.589	-0.154	
LOVING	0.248	90.338	0.619	-0.008	
ORDERLY	0.232	109.270	0.630	0.030	
OPEN-MINDED	0.125	45.202	0.723	-0.268	
PLIABLE	0.481	154.966	0.488	0.412	
POLITE	2.092	714.165	0.149	-0.286	
POPULAR	3.090	1007.889	0.079	-0.177	
PROGRESSIVE	2.923	1026.877	0.088	-0.372	
RESPONSIBLE	0.357	109.091	0.550	0.178	
SELF-RELIANT	0.040	15.903	0.841	0.085	
SOCIABLE	0.782	274.308	0.377	-0.063	
SUCCESSFUL	0.031	11.357	0.860	0.068	

DISCRIMINANT SCORES
CONTRAST
1

1
-0.609

Appendix 9-5

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR EDUCATIONAL LEVEL X SEX : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS
 TEST OF ROOTS F DFHYP DFERR F LESS THAN R
 1 THROUGH 1 0.679 30.000 484.000 0.902 0.201

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1)	MEAN SD	P LESS THAN	1	
ACTIVE	1.295	408.146	0.256	0.017	
AMBITIOUS	1.276	421.405	0.241	-0.027	
CAPABLE	1.975	383.029	0.161	-0.105	
CLEAN	0.119	44.139	0.730	-0.337	
COURAGEOUS	5.625	1826.149	0.018	0.429	
CREATIVE	5.911	1930.031	0.013	0.440	
HEALTHY	2.175	836.237	0.141	0.084	
HONEST	2.031	772.983	0.155	-0.059	
INTELLIGENT	4.817	1596.056	0.025	-0.283	
OPTIMISTIC	0.082	33.571	0.775	-0.205	
PATIENT	3.740	1171.158	0.054	-0.147	
PLEASANT	0.039	13.329	0.844	-0.372	
RATIONAL	4.191	1349.837	0.041	-0.156	
REFUGIOUS	0.268	1139.884	0.605	-0.232	
SELFCONTRD	6.084	1944.387	0.014	-0.473	
LEADERSHIP	0.890	329.105	0.346	-0.075	
CONSIDERAT	2.434	663.159	0.119	0.054	
HELPFUL	1.495	452.101	0.222	-0.031	
INDEPENDEN	0.979	317.406	0.322	-0.042	
LOVING	2.151	783.294	0.143	-0.205	
ORIENTNT	0.610	287.344	0.433	-0.209	
OPEN-MIND	0.295	106.458	0.587	-0.522	
PLIABLE	2.217	714.076	0.137	-0.193	
POLITE	1.041	335.348	0.308	-0.015	
POPULAR	1.434	467.691	0.232	-0.110	
PROGRESSIVE	1.302	456.924	0.234	-0.148	
RESPONSIBLE	1.062	324.424	0.303	-0.203	
SELF-REVEAL	0.162	64.189	0.685	-0.258	
SOCIABLE	1.595	529.880	0.206	-0.174	
SUCCESSFUL	1.434	524.841	0.232	-0.034	

Appendix 9-6

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR EDUCATIONAL LEVEL X RELIGION : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS F DFN DFR P LESS THAN R
1 THROUGH 1 1.104 30.000 484.000 0.324 0.253

UNIVARIATE F TESTS				STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
VARIABLE	F (1, 513)	MEAN SD	P LESS THAN	1	
ACTIVE	2.498	787.612	0.115	0.109	
AMBITIOUS	2.430	744.140	0.120	0.081	
CAPABLE	0.855	252.284	0.356	-0.124	
CLEAN	1.771	655.557	0.184	0.069	
COURAGEOUS	6.303	2046.258	0.012	0.397	
CREATIVE	4.127	1347.481	0.043	0.290	
HEALTHY	1.662	639.126	0.198	-0.027	
HONEST	11.534	4389.934	0.001	0.687	
INTELLIGENT	0.066	21.792	0.798	-0.453	
OPTIMISTIC	0.023	10.134	0.875	0.053	
PATIENT	1.258	393.964	0.263	-0.270	
PLEASANT	0.612	212.823	0.434	-0.556	
RATIONAL	0.224	72.858	0.635	-0.158	
RELIGIOUS	0.187	97.031	0.666	-0.010	
SELF CONTROL	4.002	1279.125	0.046	0.219	
LEADERSHIP	0.921	340.252	0.338	-0.052	
CONSIDERATE	2.185	595.349	0.140	0.031	
HELPFUL	2.447	749.250	0.118	0.093	
INDEPENDENT	1.573	509.627	0.210	0.066	
LOVING	0.000	0.064	0.989	-0.397	
DEPENDENT	1.071	504.653	0.301	0.154	
OPEN-MIND	11.547	557.933	0.001	0.001	
PLIABLE	0.313	100.851	0.576	-0.195	
POLITE	4.423	1510.207	0.036	0.372	
POPULAR	0.937	305.731	0.333	-0.032	
PROGRESSIVE	2.617	918.558	0.106	0.096	
RESPONSIBLE	3.866	1181.161	0.050	-0.120	
SELF-REVEAL	2.392	949.954	0.123	0.132	
SOCIABLE	0.613	214.963	0.434	-0.004	
SUCCESSFUL	2.444	894.379	0.119	0.149	

Appendix 9-7

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR SEX X RELIGION : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS
 TEST OF ROOTS F D.F.HYP D.F.ERR P LESS THAN R
 1 THROUGH 1 0.848 30.000 484.000 0.700 0.223

	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
VARIABLE	FC 1	513	MEAN SQ	P LESS THAN	1
ACTIVE	2.090	659.021	0.149	0.277	
AMBITIOUS	2.656	813.343	0.104	0.297	
CAPABLE	0.694	204.888	0.403	0.168	
CLEAN	0.043	15.913	0.836	-0.341	
COURAGEOUS	0.011	3.598	0.916	-0.193	
CREATIVE	0.011	3.483	0.918	-0.195	
HEALTHY	0.143	55.051	0.703	-0.233	
HONEST	0.000	0.001	0.999	-0.083	
INTELLIGENT	0.010	3.216	0.922	-0.159	
OPTIMISTIC	0.007	2.691	0.935	-0.137	
PATIENT	1.107	346.571	0.293	0.552	
PLEASANT	3.727	1296.245	0.054	0.515	
RATIONAL	0.002	0.171	0.961	-0.238	
RELIGIOUS	0.505	262.780	0.478	0.099	
SELFCONTROL	0.076	24.381	0.783	-0.491	
LEADERSHIP	0.764	262.258	0.383	0.020	
CONSIDERATE	0.308	84.001	0.579	0.163	
HELPLESS	0.527	174.644	0.448	-0.015	
INDEPENDENT	0.174	56.296	0.677	-0.294	
LOVING	0.607	221.113	0.436	0.070	
ORIENTED	0.107	50.573	0.743	-0.055	
OPEN-MIND	0.604	217.963	0.434	-0.135	
PLIABLE	1.496	481.724	0.222	0.351	
POLITE	0.806	275.154	0.370	0.102	
POPULAR	3.493	1139.227	0.062	0.552	
PROGRESSIVE	1.700	586.858	0.193	0.203	
RESPONSIBLE	0.589	179.836	0.443	0.135	
SELF-REVEAL	0.193	76.844	0.661	-0.410	
SOCIABLE	0.248	114.828	0.589	-0.248	
SUCCESSFUL	1.073	392.781	0.301	0.117	

Appendix 9-8

UNIVARIATE F TESTS FOR (E) x (R) x (X) : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS F DFHYE DFERR P LESS THAN R
1 THROUGH 1 1.123 30.000 484.000 0.301 0.255

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 513)	MEAN	P LESS THAN	1	
ACTIVE	3.173	1000.449	0.075	-0.365	
AMBITIOUS	0.613	187.699	0.434	-0.091	
CAPABLE	0.761	224.819	0.383	-0.039	
CLEAN	4.289	1587.516	0.039	-0.595	
COURAGEOUS	0.168	54.830	0.682	0.341	
CREATIVE	0.909	296.738	0.341	0.453	
HEALTHY	1.192	458.395	0.275	-0.167	
HONEST	1.674	637.134	0.196	-0.217	
INTELLIGENT	0.896	297.335	0.344	-0.379	
OPTIMISTIC	0.074	30.430	0.785	-0.027	
PATIENT	0.000	0.000	0.997	-0.088	
PLEASANT	0.386	134.318	0.535	-0.024	
RATIONAL	1.878	604.999	0.171	0.509	
REFLIGIOUS	0.107	55.145	0.744	-0.003	
SELFCONTROL	0.443	141.450	0.506	-0.040	
LEADERSHIP	0.102	133.333	0.750	0.153	
CONSIDERATE	0.047	11.123	0.828	0.298	
HELPLESS	0.891	22.693	0.346	-0.186	
INDEPENDENT	2.933	970.347	0.087	-0.264	
LOVING	0.203	74.803	0.623	0.310	
ORENIENT	0.851	400.806	0.349	-0.242	
OPEN-MIND	0.987	353.866	0.321	-0.474	
PLIABLE	0.002	0.002	0.963	0.186	
POLITE	0.006	2.217	0.936	0.160	
POPULAR	0.052	16.821	0.820	0.095	
PROGRESSIVE	0.436	140.414	0.514	-0.269	
RESPONSIBLE	0.319	93.156	0.582	-0.077	
SELF-REVEAL	0.038	23.119	0.800	0.168	
SOCIABLE	0.212	74.439	0.643	-0.186	
SUCCESSFUL	0.027	9.888	0.870	0.239	

Appendix 10-1

MEANS AND STANDARD DEVIATIONS OF THE IDEAL SELF CONCEPTS FOR THE 8 NEW ZEALAND GROUPS (2E x 2K x 2R)

FACTOR			R		VARIABLE							
E	X	1			ACTIVE	AMBITIOUS	CAPABLE	CLEAN	COURAGEOUS	CREATIVE	HEALTHY	HONEST
2	1	1	85	OBS	H	29.765	12.828	26.687	18.706	7.988	38.988	21.882
					SD	18.738	17.516	18.087	16.355	12.473	16.183	15.328
2	1	2	140	OBS	H	26.207	18.718	26.907	18.843	18.907	21.236	35.818
					SD	14.185	15.987	13.942	16.086	15.291	18.995	13.759
2	2	1	42	OBS	H	25.952	12.500	24.088	18.167	12.229	29.167	35.718
					SD	16.829	20.129	16.610	16.114	16.981	14.813	15.581
2	2	2	61	OBS	H	26.203	18.934	26.311	20.328	12.951	23.180	35.815
					SD	14.290	14.864	13.413	16.879	13.241	16.098	12.822
3	1	1	85	OBS	H	27.118	13.181	26.671	11.941	9.200	26.682	35.565
					SD	15.968	19.061	14.099	19.420	15.353	16.958	16.803
3	1	2	101	OBS	H	25.792	14.218	27.426	16.139	11.287	23.000	33.317
					SD	13.779	14.311	15.093	16.657	13.886	15.972	15.973
3	2	1	27	OBS	H	30.185	17.037	28.889	11.956	18.815	32.222	41.111
					SD	15.158	14.951	18.251	16.171	23.958	14.632	13.187
3	2	2	39	OBS	H	27.021	19.282	28.179	19.615	12.832	23.682	35.764
					SD	14.921	19.282	19.242	19.615	16.635	15.763	14.292
FACTOR			R		VARIABLE							
E	X	1			INTELLIGENT	OPTIMISTIC	PATIENT	PLEASANT	RATIONAL	RELIGIOUS	SELFCONTRD	LEADERSHIP
2	1	1	85	OBS	H	29.722	12.383	28.824	27.776	17.888	29.529	20.531
					SD	14.372	12.383	13.824	15.968	17.888	24.288	17.981
2	1	2	140	OBS	H	19.321	17.636	25.557	26.821	22.936	13.936	16.868
					SD	16.699	16.097	15.398	16.577	17.188	26.445	16.380
2	2	1	42	OBS	H	30.230	18.690	23.690	24.784	21.905	24.262	7.024
					SD	16.891	19.320	14.443	14.134	17.494	18.119	10.004
2	2	2	61	OBS	H	23.988	22.377	26.344	20.820	20.988	19.590	11.721
					SD	15.978	15.454	12.763	14.640	16.994	20.439	12.809
3	1	1	85	OBS	H	23.271	16.882	28.765	23.188	24.828	20.763	18.471
					SD	18.719	15.838	14.452	15.174	17.888	18.653	16.586
3	1	2	101	OBS	H	19.277	20.000	26.257	26.139	15.639	14.851	15.445
					SD	16.262	17.015	15.333	14.914	15.397	23.838	16.491
3	2	1	27	OBS	H	25.956	23.333	26.556	31.607	20.000	24.848	15.741
					SD	19.282	18.657	18.428	16.408	17.016	21.276	19.689
3	2	2	39	OBS	H	20.333	19.308	25.205	27.000	17.382	19.193	13.822
					SD	16.888	14.874	15.402	16.268	19.392	17.919	16.825
FACTOR			R		VARIABLE							
E	X	1			CONSIDERAT	HELPFUL	INDEPENDEN	LOVING	OBEDIENT	OPEN-MIND	PLIABLE	POLITE
2	1	1	85	OBS	H	27.318	24.412	24.353	28.682	14.976	25.694	19.289
					SD	14.223	13.593	14.561	16.348	16.802	15.917	19.684
2	1	2	140	OBS	H	29.729	25.714	21.179	28.407	15.793	22.586	20.471
					SD	13.442	14.098	11.713	16.152	15.843	14.160	14.393
2	2	1	42	OBS	H	32.786	24.429	30.119	37.029	4.647	32.837	19.095
					SD	14.569	14.237	16.581	15.929	14.657	12.935	19.108
2	2	2	61	OBS	H	31.803	29.098	26.803	30.164	10.736	27.689	21.086
					SD	13.633	14.098	15.493	15.968	14.284	13.512	14.321
3	1	1	85	OBS	H	26.774	23.000	23.765	26.000	3.294	30.859	18.882
					SD	14.112	14.520	16.015	16.633	16.348	14.531	16.256
3	1	2	101	OBS	H	30.980	24.644	18.671	30.149	12.248	25.099	21.683
					SD	13.991	13.854	19.338	15.903	15.517	16.328	19.142
3	2	1	27	OBS	H	30.919	31.836	32.778	39.073	22.963	40.125	27.778
					SD	13.132	16.797	16.418	12.938	15.844	11.043	16.586
3	2	2	39	OBS	H	33.938	27.236	29.182	31.613	11.025	27.000	23.889
					SD	14.882	15.182	17.182	16.958	16.959	16.326	16.892
FACTOR			R		VARIABLE							
E	X	1			POPULAR	PROGRESSIVE	RESPONSIBLE	SLF-REVEAL	SOCIABLE	SUCCESSFUL	* Key For Factor	
2	1	1	85	OBS	H	13.494	18.882	27.671	8.318	17.235		
					SD	15.792	14.988	13.009	17.708	16.717		
2	1	2	140	OBS	H	14.950	16.097	31.079	9.036	20.407		
					SD	16.787	14.508	13.498	19.894	16.301		
2	2	1	42	OBS	H	14.762	18.024	26.190	13.736	19.952		
					SD	16.455	15.590	15.334	19.712	14.761		
2	2	2	61	OBS	H	18.033	18.836	22.836	10.982	24.104	12.813	13.594
					SD	15.945	12.555	12.716	16.444	13.710	16.008	16.869
3	1	1	85	OBS	H	13.235	20.118	27.412	9.647	17.071	13.594	19.481
					SD	15.478	15.019	16.357	19.130	15.131	20.869	16.493
3	1	2	101	OBS	H	15.297	18.082	14.663	11.386	21.089	16.493	16.493
					SD	13.398	14.985	14.663	11.386	13.365	16.493	16.493
3	2	1	27	OBS	H	21.759	21.236	19.423	16.914	17.370	21.382	21.382
					SD	22.165	21.236	19.423	16.914	17.370	21.382	21.382
3	2	2	39	OBS	H	14.972	14.615	35.333	12.897	23.795	12.482	12.482
					SD	14.972	14.615	13.397	12.897	15.042	12.482	12.482

Appendix 10-2

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR EDUCATIONAL LEVEL (E) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS F DFHYP DFERR P LESS THAN R
1 THROUGH 1 1.749 30.000 543.000 0.009 0.297

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 572)	MEAN SD	P LESS THAN	1	
ACTIVE	0.029	6.3362	0.864	-0.235	
AMBITIOUS	0.001	0.276	0.975	0.043	
CAPABLE	1.010	217.834	0.313	0.210	
CLEAN	3.450	1010.136	0.064	-0.399	
COURAGEOUS	0.593	133.733	0.442	0.149	
CREATIVE	2.399	648.398	0.122	0.140	
HEALTHY	0.335	83.264	0.563	0.234	
HONEST	0.037	9.098	0.847	-0.018	
INTELLIGENT	1.797	514.138	0.181	-0.677	
OPTIMISTIC	0.679	184.375	0.410	-0.160	
PATIENT	0.002	0.354	0.968	-0.022	
PLEASANT	0.501	116.746	0.479	-0.276	
RATIONAL	0.254	72.719	0.614	-0.226	
RELIGIOUS	0.011	6.128	0.917	-0.018	
SELF-CONTROL	0.119	38.483	0.731	0.079	
LEADERSHIP	0.868	223.069	0.352	0.151	
CONSIDERATE	1.430	277.997	0.232	0.509	
HELPFUL	0.037	7.476	0.848	-0.350	
INDEPENDENT	0.242	74.663	0.623	-0.158	
LOVING	0.000	0.082	0.986	-0.117	
ORIENTED	3.195	845.519	0.074	-0.374	
OPEN-MINDED	2.870	1390.043	0.016	0.370	
PLEASANT	2.125	601.895	0.145	0.066	
POLITE	0.005	1.091	0.946	0.124	
POPULAR	0.013	4.194	0.902	-0.102	
PROGRESSIVE	1.073	242.223	0.301	-0.096	
RESPONSIBLE	0.590	125.752	0.443	0.091	
SELF-REFLECTIVE	1.808	536.686	0.179	0.260	
STRICT	0.092	21.617	0.762	-0.141	
SUCCESSFUL	5.778	2061.142	0.017	0.801	

DISCRIMINANT SCORES

CONTRAST
1

1
-0.337

Appendix 10-3

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR SEX (X) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	3.822	30.000	543.000	0.001	0.418

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC 1, 572)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.044	9.632	0.834	-0.233	
AMBITIOUS	0.189	51.942	0.684	-0.148	
CAPABLE	0.001	0.129	0.981	-0.142	
CLEAN	0.475	139.037	0.491	0.139	
COURAGEOUS	5.900	1331.209	0.015	-0.199	
CREATIVE	4.260	1151.190	0.039	-0.052	
HEALTHY	5.875	1459.834	0.014	-0.073	
HONEST	2.993	731.139	0.084	-0.063	
INTELLIGENT	7.781	2226.748	0.003	0.359	
OPTIMISTIC	5.076	1278.331	0.025	-0.040	
PATIENT	0.972	214.043	0.323	-0.031	
PLEASANT	2.973	693.035	0.085	-0.021	
RATIONAL	0.773	220.957	0.380	-0.233	
RELIGIOUS	5.381	3002.306	0.021	-0.327	
SELF-CONTROL	1.241	371.277	0.266	-0.125	
LEADERSHIP	12.082	3103.233	0.001	-0.519	
CONSIDERATE	11.786	2290.686	0.001	0.367	
HELPFUL	4.757	977.215	0.029	-0.124	
INDEPENDENT	19.518	6014.396	0.001	0.274	
LIVING	13.158	3282.039	0.001	-0.233	
DEPENDENT	2.908	768.916	0.089	-0.280	
OPEN-MIND	14.298	3385.701	0.001	-0.234	
PI-ABLE	10.670	3022.333	0.001	-0.202	
POLITE	0.138	33.443	0.710	-0.218	
POPULAR	3.265	896.668	0.071	0.187	
PROGRESSIVE	0.454	102.972	0.501	-0.233	
RESPONSIBLE	0.416	88.547	0.519	-0.005	
SELF-REVEAL	4.236	1304.193	0.040	-0.007	
SOCIABLE	8.245	1939.533	0.004	-0.160	
SUCCESSFUL	0.008	2.850	0.929	-0.046	

DISCRIMINANT SCORES
CONTRAST
1

1
-0.518

Appendix 10-4

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR RELIGION (R) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS
 TEST OF ROOTS F DFHYP DFERR P LESS THAN R
 1 THROUGH 1 6.731 30.000 543.000 0.001 0.521

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 572)	MEAN SQ	P LESS THAN	1	
ACTIVE	2.234	487.068	0.136	-0.091	
AMBITIOUS	13.863	3809.250	0.001	-0.316	
CAPABLE	0.455	98.070	0.500	-0.102	
CLEAN	10.586	3099.928	0.001	-0.068	
COURAGEOUS	1.399	313.601	0.237	-0.083	
CREATIVE	8.826	2385.050	0.003	-0.064	
HEALTHY	4.938	1227.029	0.027	-0.013	
HONEST	6.193	1512.607	0.013	-0.034	
INTELLIGENT	11.224	3211.853	0.001	-0.238	
OPTIMISTIC	2.185	593.231	0.140	-0.039	
PATIENT	2.458	541.106	0.118	-0.026	
PLEASANT	0.023	5.281	0.880	-0.132	
RATIONAL	3.826	1094.070	0.051	-0.118	
RELIGIOUS	11.603	62268.926	0.001	-0.376	
SELFCONTROL	11.432	3420.179	0.001	-0.017	
LEADERSHIP	5.859	1504.917	0.018	-0.114	
CONSIDERATE	0.861	167.303	0.354	-0.105	
HELPFUL	2.861	581.696	0.091	-0.041	
INDEPENDENT	6.774	2087.423	0.009	-0.061	
LOVING	0.335	83.745	0.563	-0.072	
OPEN-MINDED	62.157	16444.598	0.001	-0.204	
OPEN-MIND	21.033	4980.357	0.001	-0.264	
PLIABLE	1.135	321.399	0.287	-0.055	
POLITE	28.300	6839.098	0.001	-0.283	
POPULAR	0.383	105.157	0.536	-0.007	
PROGRESSIVE	1.338	303.306	0.248	-0.098	
RESPONSIBLE	8.718	1856.528	0.003	-0.163	
SELF-REVEAL	0.106	32.520	0.745	-0.055	
SOCIABLE	5.818	1367.824	0.016	-0.259	
SUCCESSFUL	0.563	200.693	0.454	-0.075	

DISCRIMINANT SCORES

CONTRAST
1

1
-0.626

Appendix 10-5

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR EDUCATIONAL LEVEL X SEX : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS F DFHYP DFERR P LESS THAN R
1 THROUGH 1 0.947 30.000 543.000 0.549 0.223

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 572)	MEAN	P LESS THAN	I	
ACTIVE	1.645	358.532	0.200	0.246	
AMBITIOUS	0.285	78.302	0.594	-0.001	
CAPABLE	1.490	321.164	0.223	0.127	
CLEAN	0.012	3.658	0.911	0.082	
COURAGEOUS	0.027	6.110	0.869	-0.052	
CREATIVE	0.053	14.273	0.818	-0.136	
HEALTHY	0.018	4.539	0.893	-0.051	
HONEST	0.422	103.178	0.516	-0.035	
INTELLIGENT	2.147	614.474	0.143	-0.747	
OPTIMISTIC	0.376	102.200	0.540	-0.075	
PATIENT	0.582	128.217	0.444	-0.458	
PLEASANT	0.066	15.488	0.797	0.013	
RATIONAL	1.234	352.933	0.267	0.298	
RELIGIOUS	0.496	76.789	0.482	-0.136	
SELF-CONTROL	0.000	0.000	0.997	0.076	
LEADERSHIP	0.413	106.113	0.521	0.124	
CONSIDERATE	0.822	159.683	0.365	0.196	
HELPFUL	0.589	111.980	0.443	0.006	
INDEPENDENT	1.172	361.142	0.279	0.307	
LOVING	0.473	118.287	0.492	0.133	
ORDERLY	0.207	54.680	0.650	-0.031	
OPEN-MINDED	0.052	12.407	0.819	-0.131	
PLIABLE	0.597	169.246	0.440	-0.203	
POLITE	1.413	341.514	0.235	-0.504	
POPULAR	0.037	10.055	0.848	0.075	
PROGRESSIVE	0.821	4.866	0.884	-0.082	
RESPONSIBLE	3.894	829.240	0.049	0.730	
SELF-REVEALING	0.195	59.915	0.659	0.195	
SOCIABLE	0.355	83.455	0.552	-0.118	
SUCCESSFUL	0.159	56.572	0.691	0.188	

Appendix 10-6

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR EDUCATIONAL LEVEL X RELIGION : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS F DFHYP DFERR P LESS THAN R
1 THROUGH 1 0.718 30.000 543.000 0.866 0.195

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC 1	MEAN SQ	P LESS THAN	1	
ACTIVE	0.041	8.941	0.840	-0.201	
AMBITIOUS	0.489	134.317	0.485	-0.310	
CAPABLE	0.011	2.429	0.916	-0.030	
CLEAN	0.021	6.100	0.885	0.032	
COURAGEOUS	0.146	32.855	0.703	0.066	
CREATIVE	0.273	73.677	0.602	0.086	
HEALTHY	0.003	0.767	0.956	0.145	
HONEST	0.055	13.348	0.815	-0.240	
INTELLIGENT	0.064	16.401	0.800	-0.054	
OPTIMISTIC	0.267	72.508	0.606	-0.047	
PATIENT	0.777	170.972	0.379	0.618	
PLEASANT	0.379	88.452	0.538	0.258	
RATIONAL	0.719	205.747	0.397	-0.266	
RELIGIOUS	0.032	575.812	0.310	0.313	
SELF-CONTROL	0.432	135.125	0.502	-0.280	
LEADERSHIP	0.024	6.149	0.877	0.036	
CONSIDERATE	0.066	12.792	0.798	0.113	
HELPFUL	0.126	25.541	0.723	-0.012	
INDEPENDENT	0.277	63.294	0.599	0.176	
LOVING	1.738	434.768	0.188	-0.785	
OREGENT	0.138	41.799	0.691	0.258	
OPEN-MIND	1.387	328.343	0.239	0.531	
PLIABLE	0.025	7.106	0.874	-0.222	
POLITE	1.301	314.510	0.254	-0.618	
POPULAR	0.379	104.185	0.538	0.220	
PROGRESSIVE	0.223	50.504	0.637	0.126	
RESPONSIBLE	0.004	0.880	0.949	-0.045	
SELF-REVEAL	0.055	17.060	0.814	-0.113	
SOCIABLE	0.123	28.941	0.726	0.097	
SUCCESSFUL	0.140	49.765	0.709	-0.199	

Appendix 10-7

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR SEX X RELIGION : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS
 TEST OF ROOTS F DF HYP DF ERR P LESS THAN R
 1 THROUGH 1 1.080 30.000 543.000 0.355 0.237

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 572)	MEAN SD	P LESS THAN	1	
ACTIVE	0.576	125.666	0.448	-0.215	
AMBITIOUS	0.166	45.622	0.684	-0.219	
CAPABLE	0.130	28.013	0.719	-0.086	
CLEAN	0.667	195.225	0.415	-0.169	
COURAGEOUS	0.913	505.915	0.330	-0.133	
CREATIVE	1.856	501.650	0.174	-0.135	
HEALTHY	1.719	427.042	0.190	-0.130	
HONEST	0.449	109.566	0.503	-0.179	
INTFLIGENT	0.003	0.850	0.957	-0.054	
OPTIMISTIC	0.475	129.081	0.491	-0.021	
PATIENT	0.168	36.959	0.682	-0.330	
PLEASANT	0.142	32.995	0.707	-0.267	
RATIONAL	0.735	210.141	0.392	-0.221	
REFLIGIOUS	0.191	106.732	0.665	-0.117	
SELF CONTRD	0.520	155.521	0.471	-0.131	
LEADERSHIP	0.097	24.877	0.756	-0.109	
CONSIDERAT	3.933	764.326	0.048	-0.787	
HELPFUL	0.278	56.486	0.598	-0.371	
INDEPENDEN	0.001	0.188	0.980	-0.087	
LOVING	8.613	2155.016	0.003	-0.691	
ORENIFNT	0.661	1174.351	0.417	-0.113	
OPEN-MIND	1.543	1365.773	0.214	-0.077	
PLIABLE	0.579	164.139	0.447	-0.234	
POLITE	0.023	3.462	0.881	-0.051	
POPULAR	0.445	122.295	0.505	-0.140	
PROGRESSIVE	0.490	111.138	0.484	-0.299	
RESPONSBLF	0.080	16.996	0.778	-0.225	
SELF-REFEAL	2.752	847.486	0.098	-0.100	
SOCIABLE	0.353	82.942	0.553	-0.098	
SUCCESSFUL	0.001	0.449	0.972	-0.108	

Appendix 10-8

UNIVARIATE F TESTS OF IDEAL SELF CONCEPTS FOR (E) x (R) x (X) : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS
 TEST OF ROOTS F DFHYP DFERR P LESS THAN R
 1 THROUGH 1 1.016 30.000 543.000 0.445 0.231

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC (1, 572)	MEAN SQ	P LESS THAN	1	
ACTIVE	1.013	220.723	0.315	-0.161	
AMBITIOUS	0.486	133.445	0.486	0.256	
CAPABLE	0.197	42.471	0.657	0.045	
CLEAN	0.005	1.338	0.946	0.017	
COURAGEOUS	0.255	59.482	0.614	0.130	
CREATIVE	0.034	9.110	0.854	-0.194	
HEALTHY	3.945	980.246	0.047	0.455	
HONEST	0.870	212.326	0.351	-0.474	
INTELLIGENT	0.138	39.564	0.710	-0.201	
OPTIMISTIC	1.876	509.240	0.171	0.159	
PATIENT	1.448	318.865	0.229	0.318	
PLEASANT	2.987	696.289	0.084	0.176	
RATIONAL	0.429	122.725	0.513	0.138	
RELIGIOUS	0.007	4.020	0.932	0.210	
SELF-CONTROLLED	0.565	168.975	0.453	-0.255	
LEADERSHIP	0.137	35.275	0.711	-0.001	
CONSIDERATE	0.655	127.264	0.419	-0.181	
HELPFUL	4.638	942.871	0.032	0.674	
INDEPENDENT	0.007	2.026	0.935	-0.125	
LOVING	0.703	175.846	0.402	-0.009	
ORGANIZED	4.288	1134.398	0.036	-0.509	
OPEN-MINDED	1.269	300.453	0.260	0.135	
PLIABLE	0.182	51.652	0.670	-0.023	
POLITE	0.389	94.018	0.533	-0.225	
POPULAR	2.996	822.777	0.084	0.263	
PROGRESSIVE	0.465	105.471	0.495	-0.091	
RESPONSIBLE	0.054	11.575	0.816	-0.297	
SELF-RELIANT	0.209	64.450	0.647	-0.076	
SOCIABLE	1.308	307.678	0.253	-0.085	
SUCCESSFUL	1.009	359.912	0.316	0.150	

Appendix 11

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR SOCIAL CLASS EFFECT : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	1.616	30.000	318.000	0.024	0.364

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	FC 1, 347)	MEAN SQ	P LESS THAN	1	
ACTIVE	0.586	298.802	0.444	-0.355	
AMBITIOUS	1.405	686.900	0.237	-0.074	
CAPABLE	12.431	4605.767	0.001	0.526	
CLEAN	0.818	390.341	0.366	-0.382	
COURAGEOUS	7.591	4111.496	0.006	0.337	
CREATIVE	0.981	477.930	0.323	-0.180	
HEALTHY	2.095	1299.152	0.149	0.058	
HONEST	5.774	2956.926	0.017	0.287	
INTELLIGENT	3.763	1404.760	0.053	0.100	
OPTIMISTIC	3.613	2175.619	0.058	0.240	
PATIENT	0.147	90.535	0.702	-0.023	
PLEASANT	2.244	1168.861	0.135	0.133	
RATIONAL	3.189	1555.165	0.075	-0.285	
RELIGIOUS	0.427	391.664	0.514	-0.121	
SELF-CONTROL	0.801	416.126	0.371	-0.165	
LEADERSHIP	2.203	1271.370	0.139	0.240	
CONSIDERATE	0.507	222.532	0.477	-0.333	
HELPFUL	0.193	80.172	0.661	-0.153	
INDEPENDENT	0.668	351.961	0.414	-0.006	
LOVING	3.403	1520.517	0.066	0.431	
OBEYIENT	0.809	470.581	0.369	0.033	
OPEN-MIND	0.223	107.111	0.637	-0.111	
PLIABLE	0.510	251.032	0.476	-0.086	
POLITE	0.022	8.508	0.883	-0.267	
POPULAR	2.561	1262.416	0.110	0.021	
PROGRESSIVE	1.791	884.753	0.182	-0.030	
RESPONSIBLE	3.841	1492.037	0.051	0.383	
SELF-REVEAL	1.213	784.556	0.272	-0.463	
SOCIABLE	0.975	612.356	0.324	-0.218	
SUCCESSFUL	0.003	1.696	0.956	-0.164	

DISCRIMINANT SCORES

CONTRAST	1
1	0.389

Appendix 12

UNIVARIATE F TESTS OF ACTUAL SELF CONCEPTS FOR SOCIAL CLASS EFFECT : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 1	2.066	30.000	332.000	0.001	0.397

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(1, 361)	MEAN SQ	P LESS THAN	1	
ACTIVE	1.151	480.383	0.284	-0.249	
AMBITIOUS	4.866	1830.117	0.028	0.253	
CAPABLE	5.234	1425.991	0.023	0.172	
CLEAN	8.018	2837.974	0.005	0.162	
COURAGEOUS	0.531	164.645	0.467	-0.026	
CREATIVE	2.875	1290.269	0.091	0.107	
HEALTHY	8.268	3384.467	0.004	0.244	
HONEST	0.112	46.499	0.738	0.181	
INTFLIGENT	0.006	1.744	0.941	-0.192	
OPTIMISTIC	6.022	2769.584	0.015	0.221	
PATIENT	1.219	637.178	0.270	-0.196	
PLEASANT	1.217	441.717	0.271	-0.215	
RATIONAL	0.550	173.589	0.459	-0.121	
RELIGIOUS	19.678	18454.418	0.001	-0.607	
SELFCONTRD	1.648	682.263	0.200	0.177	
LEADERSHIP	1.086	472.967	0.298	0.066	
CONSIDERAT	2.167	645.111	0.142	0.200	
HELPFUL	0.028	9.560	0.868	-0.303	
INDEPENDEN	1.913	757.290	0.167	0.028	
LOVING	6.998	2713.021	0.009	-0.015	
OBEDIENT	0.259	111.926	0.611	0.051	
OPEN-MIND	4.313	1635.299	0.039	-0.046	
PLIABLE	3.309	1322.483	0.070	0.141	
POLITE	3.423	1168.791	0.065	0.018	
POPULAR	18.352	6289.380	0.001	0.377	
PROGRESSIVE	5.518	1534.903	0.019	-0.001	
RESPONSBLE	3.046	1037.849	0.082	-0.194	
SELF-REVEAL	4.392	1890.039	0.037	0.118	
SOCIABLE	15.465	8721.444	0.001	0.187	
SUCCESSFUL	3.759	1095.791	0.053	-0.041	

DISCRIMINANT SCORES

CONTRAST

1

1
0.447

Appendix 13

UNIVARIATE F TESTS FOR PAST, PRESENT AND FUTURE SELF CONCEPTS : KOREA

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS

TEST OF ROOTS	F	DFNYP	DFERR	P LESS THAN	R
1 THROUGH 2	39.769	60.000	5570.000	0.001	0.710
2 THROUGH 2	1.108	29.000	2785.500	0.316	0.107

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 2814)	MEAN SQ	P LESS THAN	1	
ACTIVE	292.955	217732.452	0.001	0.131	
AMBITIOUS	420.603	301925.651	0.001	0.155	
CAPABLE	416.641	217766.627	0.001	0.075	
CLEAN	335.382	214328.886	0.001	0.166	
COURAGEOUS	267.351	171150.783	0.001	0.001	
CREATIVE	247.994	143399.768	0.001	-0.033	
HEALTHY	189.447	155598.149	0.001	0.063	
HONEST	306.011	201106.714	0.001	0.030	
INTELLIGENT	228.732	120889.423	0.001	-0.080	
OPTIMISTIC	147.828	115460.539	0.001	-0.017	
PATIENT	336.729	232848.556	0.001	0.070	
PLEASANT	231.205	161148.773	0.001	0.069	
RATIONAL	300.962	181151.700	0.001	0.114	
RELIGIOUS	13.253	16471.711	0.001	-0.061	
SELF CONTRD	394.651	248485.428	0.001	-0.159	
LEADERSHIP	209.833	146406.829	0.001	-0.118	
CONSIDERAT	598.233	311343.152	0.001	0.271	
HELPFUL	436.551	237019.314	0.001	0.103	
INDEPENDEN	563.327	367371.161	0.001	0.257	
LOVING	281.223	169840.115	0.001	-0.037	
OBEDIENT	93.367	67249.760	0.001	-0.087	
OPEN-MIND	323.198	187188.343	0.001	-0.085	
PLIABLE	401.635	231198.946	0.001	0.205	
POLITE	407.425	213110.276	0.001	0.104	
POPULAR	152.230	115196.782	0.001	-0.142	
PROGRESSIVE	282.785	171279.982	0.001	-0.102	
RESPONSIBLE	564.841	311328.824	0.001	0.184	
SELF REVEAL	193.597	142833.033	0.001	0.018	
SOCIAL	185.792	132511.206	0.001	0.049	
SUCCESSFUL	313.070	220853.402	0.001	0.010	

DISCRIMINANT SCORES

CONTRAST	1
1	-0.182
2	-1.134

Appendix 14

UNIVARIATE F TESTS FOR PAST, PRESENT AND FUTURE SELF CONCEPTS : NEW ZEALAND

TESTS OF SIGNIFICANCE USING WILKS LAMBDA CRITERION AND CANONICAL CORRELATIONS					
TEST OF ROOTS	F	DFHYP	DFERR	P LESS THAN	R
1 THROUGH 2	27.940	60.000	5594.000	0.001	0.630
2 THROUGH 2	1.886	29.000	2797.500	0.003	0.138

VARIABLE	UNIVARIATE F TESTS			STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS	
	F(2, 2826)	MEAN SQ	P LESS THAN	1	2
ACTIVE	105.602	47360.438	0.001	0.042	-0.335
AMBITIOUS	130.426	61516.849	0.001	0.048	-0.041
CAPABLE	420.420	137645.706	0.001	0.384	-0.001
CLEAN	70.419	32129.966	0.001	-0.059	0.004
COURAGEOUS	40.410	13744.671	0.001	-0.167	0.040
CREATIVE	75.731	34785.116	0.001	-0.021	-0.246
HEALTHY	49.607	22409.911	0.001	-0.077	-0.220
HONEST	48.063	19476.332	0.001	-0.104	0.204
INTELLIGENT	112.506	36007.735	0.001	-0.022	0.226
OPTIMISTIC	48.007	22406.335	0.001	-0.044	0.050
PATIENT	75.439	37391.280	0.001	0.072	-0.150
PLEASANT	137.280	49631.012	0.001	0.052	-0.038
RATIONAL	131.641	49166.815	0.001	0.018	-0.148
RELIGIOUS	5.861	6078.378	0.003	0.069	-0.017
SELF-CONTROL	150.043	67482.244	0.001	0.123	0.057
LEADERSHIP	155.661	72322.579	0.001	0.089	0.018
CONSIDERATE	258.339	83385.839	0.001	0.237	0.317
HELPFUL	185.201	64881.719	0.001	0.010	-0.322
INDEPENDENT	419.877	215629.654	0.001	0.396	0.129
LOVING	229.583	106243.364	0.001	0.223	-0.218
OBEDIENT	3.804	1667.648	0.022	-0.164	-0.169
OPEN-MIND	216.264	89315.649	0.001	-0.139	0.481
PLIABLE	97.198	40482.475	0.001	-0.003	-0.132
POLITE	30.254	11123.281	0.001	-0.189	-0.154
POPULAR	99.232	32335.759	0.001	-0.079	0.510
PROGRESSIVE	175.881	56837.532	0.001	0.024	-0.168
RESPONSIBLE	290.419	105888.728	0.001	0.158	-0.070
SELF-REVEAL	41.035	21182.273	0.001	-0.070	0.238
SOCIAL	197.986	97376.723	0.001	0.164	0.083
SUCCESSFUL	159.183	58878.306	0.001	0.052	-0.549

DISCRIMINANT SCORES

CONTRAST	1	2
1	-0.033	-0.198
2	-0.975	-0.104

KEY FOR VARIABLES

- | | | |
|---------------------------|--------------------|---------------------|
| 1. Active | 2. Ambitious | 3. Capable |
| 4. Clean | 5. Courageous | 6. Creative |
| 7. Healthy | 8. Honest | 9. Intelligent |
| 10. Optimistic | 11. Patient | 12. Pleasant |
| 13. Rational | 14. Religious | 15. Self-controlled |
| 16. Capable of Leadership | | 17. Considerate |
| 18. Helpful | 19. Independent | 20. Loving |
| 21. Obedient | 22. Open-Minded | 23. Pliable |
| 24. Polite | 25. Popular | 26. Progressive |
| 27. Responsible | 28. Self-Revealing | 29. Sociable |
| 30. Successful | | |

Appendix 15-1

ROTATED FACTOR MATRIX FOR HS-M (KOR)

VARIABLE 1 -0.23639	-0.11450	0.04078	<u>0.50377</u>	0.21271	-0.30078	0.27152	0.07506	-0.18678	-0.39664
VARIABLE 2 -0.15026	0.14699	-0.17148	<u>0.40995</u>	0.05189	0.00301	<u>0.51157</u>	-0.16062	-0.26142	-0.07529
VARIABLE 3 0.13658	0.20548	-0.27018	0.20588	0.26380	0.24231	<u>0.50360</u>	-0.26570	-0.04401	-0.23187
VARIABLE 4 0.02961	-0.00256	-0.12918	0.12369	0.21178	0.35876	0.38843	-0.24130	<u>0.42872</u>	-0.08566
VARIABLE 5 -0.15538	-0.09413	-0.31540	<u>0.52738</u>	-0.00109	0.12788	0.25185	-0.14200	<u>-0.26886</u>	<u>-0.56994</u>
VARIABLE 6 0.05000	-0.20005	-0.15895	0.14662	0.07084	0.21027	<u>0.64744</u>	-0.06744	-0.21963	-0.01081
VARIABLE 7 -0.22329	-0.06563	0.39264	0.25997	0.19410	0.27227	0.30782	0.05649	-0.12314	-0.38452
VARIABLE 8 -0.09596	-0.18672	0.13839	0.33719	-0.05954	<u>0.64485</u>	-0.04412	-0.24419	0.10696	-0.22989
VARIABLE 9 -0.37884	0.28038	-0.13740	0.35506	0.17299	<u>0.44311</u>	0.33869	0.02044	-0.15115	-0.20737
VARIABLE 10 0.00969	0.18018	-0.12362	<u>0.62062</u>	0.28359	0.20956	-0.17786	0.30082	-0.22804	-0.03295
VARIABLE 11 -0.38163	0.17531	-0.37034	0.35350	0.14840	0.24242	-0.25651	-0.14484	-0.10384	-0.19389
VARIABLE 12 -0.01057	-0.01277	0.02512	<u>0.60910</u>	<u>0.44027</u>	0.08919	0.06619	<u>0.40511</u>	-0.00154	-0.07501
VARIABLE 13 -0.18211	-0.27743	-0.38930	0.16370	0.32489	-0.11491	0.20229	-0.11760	-0.20779	-0.03500
VARIABLE 14 0.13895	<u>-0.45123</u>	-0.25867	0.39226	0.28637	0.11164	-0.22860	-0.00230	0.13615	-0.16267
VARIABLE 15 0.01920	-0.33539	<u>-0.60579</u>	0.23390	0.18126	0.27270	-0.09136	-0.11994	0.01064	-0.12674
VARIABLE 16 0.04131	-0.38694	-0.05737	0.18858	0.23070	-0.00802	0.30593	-0.13894	-0.37717	-0.40567
VARIABLE 17 -0.12876	-0.03930	-0.09119	-0.25744	0.28757	<u>0.49037</u>	-0.07559	-0.08488	<u>-0.47338</u>	-0.12181
VARIABLE 18 -0.20985	-0.38049	-0.01709	-0.06031	0.22578	0.26836	0.30346	0.30732	-0.30711	0.21461
VARIABLE 19 -0.18180	-0.07898	-0.18030	<u>0.40039</u>	-0.18901	0.38337	0.09835	-0.02779	<u>-0.47763</u>	0.03546
VARIABLE 20 -0.26410	-0.07234	-0.03074	0.18521	0.64393	0.04664	0.21022	-0.15912	-0.22661	0.10467
VARIABLE 21 -0.21395	-0.35416	-0.08258	0.06976	<u>0.55428</u>	0.26716	0.05792	-0.12717	-0.01068	0.17419
VARIABLE 22 -0.36877	-0.05325	-0.07442	0.28556	<u>0.41748</u>	0.30656	0.01487	-0.09789	-0.08765	0.02844
VARIABLE 23 -0.15964	0.09549	0.02053	<u>0.53153</u>	0.28890	0.07922	0.08432	-0.33834	<u>-0.22694</u>	0.22695
VARIABLE 24 0.16885	0.13616	-0.03235	0.03250	<u>0.52004</u>	<u>0.40087</u>	0.04365	-0.16186	<u>-0.40414</u>	-0.15782
VARIABLE 25 0.09018	-0.08324	0.08348	0.34029	<u>0.44161</u>	-0.03395	0.20234	<u>-0.43018</u>	-0.28254	-0.19095
VARIABLE 26 -0.20418	-0.03036	-0.28657	<u>0.58763</u>	0.11372	0.02440	0.17210	-0.15074	-0.36030	0.08498
VARIABLE 27 -0.10016	-0.30507	0.21049	0.28004	-0.09079	<u>0.43603</u>	0.20104	-0.06944	-0.31271	0.17990
VARIABLE 28 0.17447	-0.22415	0.22375	<u>0.41104</u>	0.22353	-0.09713	0.01266	-0.35661	<u>-0.45093</u>	-0.15307
VARIABLE 29 0.32369	-0.15234	0.17544	<u>0.52316</u>	<u>0.43901</u>	-0.00205	-0.11996	-0.14888	-0.26722	-0.14394
VARIABLE 30 0.21469	-0.11431	-0.10435	<u>0.57215</u>	-0.00796	0.27579	0.26520	-0.04224	-0.29679	0.28352
8.397*	1.767	1.656	1.470	1.384	1.163	1.118	1.032	0.983	0.951
28.08**	33.9%	39.4%	44.3%	48.9%	52.8%	56.5%	60.0%	63.2%	66.4%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-2

ROTATED FACTOR MATRIX FOR HS-M (N.Z.)

VARIABLE 1 0.30715	-0.00648	0.21416	0.36652	0.36765	-0.00226	-0.15080	-0.23913	0.10401
VARIABLE 2 0.12445	-0.20502	<u>0.50750</u>	-0.12949	-0.13314	<u>-0.49522</u>	-0.08822	0.26594	-0.21672
VARIABLE 3 -0.09327	-0.01254	<u>0.77287</u>	-0.01957	-0.05434	<u>-0.27536</u>	-0.09069	-0.13463	-0.09469
VARIABLE 4 0.04177	-0.20936	<u>0.46316</u>	0.31285	0.07905	-0.16712	0.04076	-0.03721	<u>-0.47545</u>
VARIABLE 5 -0.12046	0.36916	0.36559	<u>0.50204</u>	-0.21565	-0.02324	0.07067	-0.17755	0.26664
VARIABLE 6 0.23478	-0.11596	-0.26963	-0.06174	<u>-0.14424</u>	-0.08720	0.34418	-0.11652	0.01666
VARIABLE 7 0.60800	-0.18619	0.26545	<u>0.43755</u>	0.30320	-0.04080	-0.06118	-0.33244	0.04941
VARIABLE 8 -0.09221	0.18117	0.14177	-0.08362	0.17194	-0.24026	0.31638	-0.22604	<u>-0.50689</u>
VARIABLE 9 -0.13565	0.02222	<u>0.53466</u>	-0.23552	0.02148	-0.27957	-0.21739	-0.39251	-0.09616
VARIABLE 10 -0.23640	-0.06892	<u>0.52502</u>	-0.21535	-0.32555	-0.25067	0.17618	0.10318	-0.24201
VARIABLE 11 -0.33628	0.00976	0.14810	-0.06382	0.17849	-0.03468	0.11958	<u>-0.49082</u>	-0.37572
VARIABLE 12 -0.04707	-0.05343	<u>0.46309</u>	0.37779	0.28460	-0.13474	0.24047	-0.26035	-0.16559
VARIABLE 13 0.13208	0.08115	<u>0.60463</u>	-0.09723	-0.16974	0.07799	-0.03627	<u>-0.05696</u>	-0.12819
VARIABLE 14 -0.07382	<u>-0.71561</u>	-0.17235	-0.00876	-0.11312	-0.10104	0.16150	-0.02988	-0.39436
VARIABLE 15 0.15967	-0.19135	0.28185	-0.14317	0.04078	-0.37727	0.18151	-0.30148	<u>-0.45513</u>
VARIABLE 16 0.24101	0.37279	<u>0.44702</u>	0.22343	0.03307	0.26940	0.09471	-0.34178	-0.01007
VARIABLE 17 -0.10899	0.05906	0.30608	0.13966	0.09446	-0.25827	0.36782	-0.23535	<u>-0.42161</u>
VARIABLE 18 0.06921	0.22417	0.25594	-0.09519	0.32120	-0.30838	0.21879	-0.21374	<u>-0.49065</u>
VARIABLE 19 0.13884	0.15320	0.09318	-0.08138	0.12703	<u>-0.49991</u>	<u>0.44946</u>	-0.32849	0.31628
VARIABLE 20 0.08027	-0.00652	<u>-0.43648</u>	-0.33573	-0.01253	-0.06022	<u>0.62556</u>	0.25959	-0.01674
VARIABLE 21 -0.17795	0.11862	<u>0.25815</u>	-0.16125	<u>0.42386</u>	0.03826	0.20116	0.01570	<u>-0.48216</u>
VARIABLE 22 0.10419	-0.09483	<u>0.44174</u>	-0.25336	0.00118	-0.12128	0.32808	-0.32961	0.26870
VARIABLE 23 -0.16160	0.11490	0.27667	-0.17261	<u>0.55066</u>	-0.19593	0.19451	-0.35286	0.19555
VARIABLE 24 -0.04975	-0.11465	-0.20066	-0.07973	<u>0.47781</u>	-0.08928	0.33192	-0.17049	<u>-0.45113</u>
VARIABLE 25 0.28015	-0.11647	<u>0.61938</u>	0.20225	<u>0.24227</u>	0.09459	0.12101	-0.02356	0.08634
VARIABLE 26 0.13437	0.10270	<u>0.59161</u>	-0.35698	0.22184	0.22126	0.19422	0.05196	-0.10299
VARIABLE 27 0.05361	-0.11832	<u>0.54158</u>	-0.15143	0.13207	0.04626	0.29257	-0.08465	-0.28665
VARIABLE 28 0.39684	-0.15261	-0.20605	-0.15913	0.04076	0.33375	<u>0.58509</u>	-0.04785	-0.09367
VARIABLE 29 0.22874	-0.13675	<u>0.46238</u>	0.32539	0.30009	-0.08528	0.39447	0.11926	0.10154
VARIABLE 30 0.34401	0.13092	<u>0.66316</u>	-0.22873	0.23807	-0.09868	0.04171	0.07682	-0.06853
7.929*	2.797	1.646	1.465	1.407	1.244	1.086	1.043	0.986
26.41**	35.88	41.28	46.18	50.88	55.08	58.68	62.18	65.38

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-3

ROTATED FACTOR MATRIX FOR HS-F (KOR)

VARIABLE 1	-0.16305	0.13483	-0.04472	<u>-0.44519</u>	0.12873	<u>-0.50086</u>	-0.04008	0.13740	-0.33425
VARIABLE 2	0.00368	0.16748	-0.37869	-0.03229	0.33439	<u>-0.57598</u>	0.12389	-0.11958	-0.19968
VARIABLE 3	0.09504	-0.18714	<u>-0.46572</u>	-0.16550	0.14005	-0.34519	-0.03007	<u>0.56612</u>	-0.18924
VARIABLE 4	0.38470	-0.13198	-0.26247	0.18026	0.19392	0.05064	<u>-0.47886</u>	0.21716	0.22956
VARIABLE 5	0.03152	0.11861	0.06489	-0.34256	-0.24661	<u>-0.58593</u>	0.00751	0.25443	0.00347
VARIABLE 6	0.32625	-0.34596	-0.10763	<u>-0.25804</u>	-0.00638	<u>-0.32833</u>	-0.21818	0.36346	0.17015
VARIABLE 7	0.17797	-0.03647	0.00575	<u>0.43654</u>	-0.23013	<u>-0.57659</u>	-0.10329	-0.14870	-0.03547
VARIABLE 8	0.14300	-0.13147	-0.24014	0.30370	-0.01174	-0.38655	-0.23558	<u>0.48609</u>	0.20166
VARIABLE 9	0.14562	0.05757	0.04652	0.23192	0.16062	-0.12221	-0.28802	<u>0.55285</u>	<u>-0.43073</u>
VARIABLE 10	-0.02015	-0.31415	-0.05989	-0.09006	-0.30891	<u>-0.45885</u>	-0.33433	-0.05879	-0.30402
VARIABLE 11	0.20707	0.24820	<u>-0.65827</u>	0.00464	-0.32641	0.15318	-0.18681	0.04145	-0.14947
VARIABLE 12	0.04696	<u>0.42354</u>	0.10743	-0.00291	0.10008	-0.17662	<u>-0.55263</u>	-0.05764	-0.16306
VARIABLE 13	0.12754	<u>0.42266</u>	0.09021	-0.12124	0.00351	0.05867	-0.24017	0.35847	-0.27857
VARIABLE 14	<u>-0.45275</u>	-0.30199	-0.14793	-0.20234	-0.04073	-0.11929	-0.32417	0.15249	0.32147
VARIABLE 15	0.16254	0.10292	-0.36752	0.00591	-0.33560	0.02381	-0.10671	<u>0.46056</u>	-0.13075
VARIABLE 16	-0.23931	-0.09398	-0.11856	<u>-0.45482</u>	0.08324	<u>-0.41700</u>	-0.30607	0.01008	-0.19124
VARIABLE 17	0.41203	-0.04361	-0.05456	<u>-0.51126</u>	-0.18641	-0.11563	-0.32397	-0.08406	0.05447
VARIABLE 18	0.22100	0.26620	-0.28674	-0.37377	-0.34670	-0.12592	-0.28154	0.00824	0.13539
VARIABLE 19	0.18457	0.30966	-0.33928	-0.12171	0.01530	-0.21797	-0.03899	0.34532	<u>0.53289</u>
VARIABLE 20	-0.20699	-0.07612	-0.14038	<u>-0.53043</u>	-0.01768	-0.10756	<u>-0.45198</u>	0.01306	-0.30808
VARIABLE 21	0.20315	-0.21533	<u>-0.45376</u>	-0.00503	-0.27515	-0.04973	<u>-0.40679</u>	0.03850	0.07343
VARIABLE 22	0.01725	0.21431	-0.08891	-0.38073	<u>-0.52574</u>	-0.05715	<u>-0.44521</u>	-0.02527	-0.16189
VARIABLE 23	0.03110	0.06524	0.13745	<u>-0.45885</u>	0.06537	-0.30022	<u>-0.52105</u>	0.03777	0.06760
VARIABLE 24	0.41950	-0.38295	-0.18337	-0.05372	0.11206	-0.12169	<u>-0.51752</u>	0.03693	-0.16397
VARIABLE 25	-0.30197	-0.26635	-0.01037	-0.33512	-0.03714	-0.28297	<u>-0.47366</u>	0.30928	-0.27851
VARIABLE 26	-0.22498	0.18369	<u>-0.50809</u>	-0.10015	0.09494	-0.17618	<u>-0.43802</u>	0.13414	0.19773
VARIABLE 27	0.21843	0.07079	<u>-0.65980</u>	-0.03800	0.15344	-0.07267	-0.17975	0.21564	0.61102
VARIABLE 28	-0.01136	0.35966	-0.06924	<u>-0.43680</u>	<u>0.46329</u>	-0.05720	-0.24570	-0.04527	-0.12159
VARIABLE 29	-0.14365	0.10985	0.19301	<u>-0.51249</u>	0.19284	-0.28864	<u>-0.43839</u>	-0.21146	-0.04650
VARIABLE 30	<u>0.48468</u>	0.20354	-0.23967	0.00231	<u>0.42846</u>	-0.26703	-0.11957	-0.11331	-0.17461
6.341*	3.013	1.951	1.545	1.486	1.318	1.249	1.205	1.101	
21.18**	31.2%	37.7%	42.8%	47.8%	52.2%	56.3%	60.4%	64.0%	

* Eigenvalues	** Cumulative percentage of Eigenvalues
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Appendix 15-4

ROTATED FACTOR MATRIX FOR HS-F (N.2.)

VARIABLE 1 0.16706	0.05575	-0.30359	-0.46585	0.46679	0.28899	-0.05248	0.25661	0.13469
VARIABLE 2 0.07453	0.57497	-0.29132	-0.23237	-0.07468	0.44576	0.04740	-0.20193	-0.13947
VARIABLE 3 0.00282	0.07102	-0.36713	0.00419	-0.27509	0.07693	-0.00331	0.27384	0.18355
VARIABLE 4 0.01462	0.57531	-0.27595	-0.25142	0.02234	-0.17005	-0.35659	0.15871	0.04197
VARIABLE 5 -0.11420	-0.11943	-0.20468	0.01312	0.22621	0.21677	-0.07299	0.61119	0.37763
VARIABLE 6 0.28159	-0.09802	0.20464	0.19313	-0.34409	0.30255	-0.01457	0.21171	0.04293
VARIABLE 7 -0.00199	-0.03673	-0.31061	-0.29893	0.03022	0.17269	-0.19730	0.36861	0.16430
VARIABLE 8 0.22676	0.57338	-0.02920	0.09538	0.05175	-0.19450	-0.07385	0.41935	-0.20075
VARIABLE 9 0.03176	0.24802	-0.27372	0.22695	-0.15742	0.21653	0.19293	0.37506	0.36734
VARIABLE 10 0.00911	0.23894	0.02667	-0.15328	0.14984	-0.30749	0.29842	0.07390	0.11455
VARIABLE 11 -0.23852	0.33754	-0.05802	-0.21295	0.26069	0.07090	0.19214	0.52401	-0.07039
VARIABLE 12 0.00816	0.19189	-0.42928	0.19245	0.19179	-0.38581	0.07516	0.16627	0.19577
VARIABLE 13 0.19239	0.43281	0.05311	0.20591	-0.08162	0.10926	0.11303	0.35875	0.28336
VARIABLE 14 0.06855	-0.07009	-0.14876	0.00892	0.01651	-0.38111	0.39750	0.41659	-0.36894
VARIABLE 15 -0.15423	0.37101	-0.01797	0.05097	0.25933	0.25021	-0.05047	0.47984	-0.30251
VARIABLE 16 -0.04401	0.12820	-0.47210	-0.17663	-0.13267	-0.00862	0.17367	0.25432	0.51150
VARIABLE 17 0.26284	0.15824	-0.25060	-0.13138	-0.15602	-0.02978	-0.40681	0.54928	0.00526
VARIABLE 18 0.16791	0.26041	-0.30871	-0.17120	-0.26573	-0.13820	-0.32600	0.51500	0.00046
VARIABLE 19 0.32379	0.13593	0.26333	-0.58159	-0.21858	0.09173	0.02084	0.24562	0.18862
VARIABLE 20 0.56618	0.03988	-0.56533	0.08810	0.04510	0.04907	-0.18577	-0.06435	-0.06003
VARIABLE 21 -0.26087	0.31411	-0.12336	-0.03963	-0.21528	-0.01658	-0.17565	0.44020	-0.35863
VARIABLE 22 0.40043	0.02174	0.12521	-0.08208	-0.02218	0.06875	-0.43424	0.12182	0.52553
VARIABLE 23 0.43178	0.03922	0.33101	-0.04413	0.02840	-0.04990	-0.42805	0.17509	0.34307
VARIABLE 24 0.23186	0.36356	-0.27556	-0.04614	0.10118	0.01445	-0.55282	0.22330	-0.07697
VARIABLE 25 0.43598	0.05577	-0.46113	0.03794	-0.03413	0.12687	-0.04056	0.16344	-0.10099
VARIABLE 26 0.31357	0.27492	-0.35509	-0.14228	-0.21186	0.33199	-0.11136	0.00597	0.28953
VARIABLE 27 0.14606	0.49820	-0.39667	-0.06814	-0.27331	0.13439	-0.19075	0.21705	-0.00206
VARIABLE 28 0.29380	-0.32626	-0.31161	-0.40920	-0.41146	0.09381	-0.03189	0.13720	-0.06934
VARIABLE 29 0.00192	-0.02880	-0.50904	-0.01496	-0.17087	-0.08752	-0.29198	-0.06578	-0.01023
VARIABLE 30 0.15380	0.26118	-0.55301	-0.02203	-0.13449	0.39957	0.19922	0.07045	0.27101
7.445*	2.313	2.019	1.886	1.526	1.332	1.109	1.065	1.000
24.8%**	32.58	39.38	45.58	50.68	55.18	58.88	62.38	65.78

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-5

ROTATED FACTOR MATRIX FOR JU-M (KOR)

VARIABLE 1								
0.27466	-0.23452	0.07140	-0.16057	0.20435	-0.17129	-0.53503	-0.26734	-0.22619
VARIABLE 2								
0.11606	-0.22793	-0.31786	0.04688	0.00695	0.27698	-0.45858	-0.46836	-0.01923
VARIABLE 3								
0.03779	-0.24292	-0.11786	-0.37029	0.16401	0.20406	-0.47893	-0.24998	-0.14108
VARIABLE 4								
0.06684	0.44202	-0.04838	-0.31180	0.45776	0.35877	-0.10278	-0.27096	0.07496
VARIABLE 5								
0.12332	-0.07709	0.09209	-0.53714	-0.05329	-0.00636	-0.56731	-0.24424	-0.14442
VARIABLE 6								
0.06994	-0.07302	-0.04271	-0.56142	-0.16661	0.04580	-0.43509	-0.01859	-0.20077
VARIABLE 7								
0.51712	-0.07047	0.21204	-0.33091	-0.12890	-0.32374	-0.02771	-0.06298	-0.10476
VARIABLE 8								
0.21919	0.27312	-0.27406	-0.53634	-0.19941	0.15769	0.00275	-0.18488	-0.13322
VARIABLE 9								
0.08367	-0.15755	-0.14045	-0.41463	-0.08508	0.36176	-0.29676	-0.19259	-0.26109
VARIABLE 10								
0.36229	0.17268	0.06616	-0.02161	0.00302	-0.03583	-0.05875	-0.46020	-0.62663
VARIABLE 11								
0.29803	0.08410	-0.25851	-0.21301	-0.20313	-0.17991	0.13520	-0.64062	0.20144
VARIABLE 12								
0.26031	-0.04433	0.13733	-0.06221	0.26492	-0.12098	-0.08539	-0.26347	-0.62058
VARIABLE 13								
0.01379	-0.39130	-0.37440	-0.26753	-0.12158	0.30099	0.10427	-0.16938	-0.29211
VARIABLE 14								
0.53625	0.08193	-0.11954	-0.32344	0.00305	-0.28298	0.15071	-0.41177	-0.17776
VARIABLE 15								
0.17939	-0.26607	-0.46290	-0.36030	0.11239	-0.15295	0.24187	-0.38808	0.06482
VARIABLE 16								
0.06233	-0.40125	-0.00832	-0.37922	0.26068	-0.27531	-0.29051	-0.21284	-0.16210
VARIABLE 17								
0.26475	-0.25518	-0.16584	-0.60901	0.14810	-0.09459	0.18572	-0.19137	-0.03151
VARIABLE 18								
0.57215	-0.14027	-0.07056	-0.46390	0.13306	0.01421	0.11106	-0.00534	-0.12262
VARIABLE 19								
0.17512	-0.16801	-0.07415	-0.36443	-0.22511	0.04342	-0.40053	-0.37017	0.34326
VARIABLE 20								
0.16847	0.03185	0.43418	-0.47193	0.27941	0.26444	0.12806	-0.25621	0.04552
VARIABLE 21								
0.24236	0.16736	0.31017	-0.11793	-0.02426	0.22501	0.33672	-0.40544	0.14193
VARIABLE 22								
0.13532	-0.22211	0.27906	-0.37259	-0.14004	0.04197	0.23019	-0.57166	-0.05091
VARIABLE 23								
0.07918	-0.42613	0.22982	-0.33858	-0.28929	0.17437	0.09265	-0.17008	-0.45170
VARIABLE 24								
0.18030	0.07757	-0.12012	-0.32714	0.02310	0.54092	0.15169	-0.21647	-0.25505
VARIABLE 25								
0.21914	-0.43186	0.07921	-0.30354	0.32624	0.10314	0.00553	-0.28739	-0.24571
VARIABLE 26								
0.00023	-0.48061	-0.10155	-0.26373	-0.08978	0.26497	-0.29620	-0.23140	-0.14623
VARIABLE 27								
0.50320	-0.19980	-0.23135	-0.29134	-0.23038	0.35606	-0.12584	-0.16496	0.13629
VARIABLE 28								
0.11931	-0.63520	0.15827	-0.28093	0.16236	0.14997	-0.19813	-0.15932	-0.19100
VARIABLE 29								
0.06634	-0.39305	0.05932	-0.16012	0.58395	0.14734	-0.09624	-0.15563	-0.31190
VARIABLE 30								
0.05737	-0.34672	-0.01624	0.06218	-0.15255	0.34801	-0.16838	-0.56327	-0.00026

7.755*	2.498	1.966	1.456	1.394	1.223	1.155	1.065	1.016
25.9%**	34.28	40.78	45.68	50.28	54.38	58.28	61.78	65.18

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-6
ROTATED FACTOR MATRIX FOR JU-M (N.Z.)

VARIABLE 1 0.20231	0.19260	0.09003	<u>-0.45983</u>	<u>0.60064</u>	0.14111	0.03437	0.12456	0.08382
VARIABLE 2 0.12100	0.00760	0.10434	<u>-0.71102</u>	0.18642	-0.16837	-0.07678	-0.12399	-0.04149
VARIABLE 3 0.03266	0.16072	0.26174	<u>-0.54256</u>	0.06682	-0.15033	-0.34526	0.16113	-0.27391
VARIABLE 4 0.09842	0.17076	0.13729	-0.14657	-0.02521	<u>-0.73487</u>	-0.21380	0.07791	-0.01766
VARIABLE 5 0.19018	0.03680	<u>0.58750</u>	-0.26983	0.20053	-0.23693	-0.03066	0.14997	0.07895
VARIABLE 6 0.08300	0.01897	<u>0.73612</u>	-0.03728	-0.01514	0.19094	-0.26811	0.14417	-0.03479
VARIABLE 7 0.08204	-0.02834	0.00669	-0.17490	<u>0.79828</u>	-0.06964	-0.09018	0.05696	-0.19323
VARIABLE 8 0.03369	<u>0.46351</u>	0.22826	-0.06105	0.19106	-0.32763	-0.14140	0.11906	-0.22875
VARIABLE 9 0.08502	0.12047	0.15513	-0.15695	-0.00658	-0.01078	<u>-0.77515</u>	0.11523	-0.08520
VARIABLE 10 0.01819	0.01706	0.06393	-0.13771	0.12024	0.17956	-0.18417	0.03974	<u>-0.70444</u>
VARIABLE 11 0.07761	0.20859	0.01331	0.01741	0.06968	-0.33845	-0.01026	0.09836	<u>-0.72846</u>
VARIABLE 12 0.05021	0.21589	0.06564	-0.04546	0.32327	-0.07261	-0.19581	0.11107	<u>-0.46001</u>
VARIABLE 13 0.08092	0.33394	0.16783	-0.10028	0.20385	-0.06812	<u>-0.53787</u>	0.09761	-0.22645
VARIABLE 14 0.17280	0.00835	<u>0.50125</u>	-0.26153	<u>-0.15326</u>	-0.26098	0.24610	-0.29885	-0.23780
VARIABLE 15 0.14444	0.21899	-0.02926	-0.15562	-0.00704	-0.28319	<u>0.45700</u>	-0.01317	<u>-0.47263</u>
VARIABLE 16 0.07615	0.23865	0.10552	<u>-0.57445</u>	0.14306	-0.03236	-0.12196	-0.00734	-0.13591
VARIABLE 17 0.03359	<u>0.82311</u>	0.01537	-0.07015	0.02428	-0.01333	-0.10843	0.21615	-0.06273
VARIABLE 18 0.07770	<u>0.79961</u>	-0.06011	-0.11492	-0.08754	-0.08736	-0.04189	-0.02466	-0.08073
VARIABLE 19 0.17900	0.15093	-0.14049	<u>-0.47357</u>	0.14272	0.03373	-0.12631	<u>0.56987</u>	-0.16956
VARIABLE 20 0.08153	<u>0.48467</u>	0.15118	-0.15886	0.10546	-0.12528	-0.00064	0.20063	-0.11145
VARIABLE 21 0.31336	0.05933	-0.20916	-0.07859	0.01593	<u>-0.65392</u>	0.09762	-0.13305	-0.24370
VARIABLE 22 0.13767	0.26732	0.13507	-0.06807	-0.02341	0.00648	-0.06497	<u>0.73139</u>	-0.01483
VARIABLE 23 0.03371	0.01234	0.07886	0.03301	0.13399	-0.06932	-0.03325	<u>0.77696</u>	-0.07420
VARIABLE 24 0.29123	0.39013	0.07166	0.13366	0.38158	<u>-0.45712</u>	-0.22941	0.16243	-0.11681
VARIABLE 25 0.70723	0.20743	0.09183	-0.09757	0.25973	-0.09353	-0.19961	0.15102	-0.04088
VARIABLE 26 0.20725	0.09504	0.11314	<u>-0.64691</u>	-0.04945	0.07811	-0.15559	0.39441	0.12208
VARIABLE 27 0.01065	<u>0.50208</u>	-0.03372	<u>-0.42940</u>	0.19268	-0.23866	-0.17339	0.10843	-0.08513
VARIABLE 28 0.68876	-0.08415	0.16993	-0.15370	-0.09300	-0.13515	0.05550	0.17190	-0.06119
VARIABLE 29 0.75722	0.26890	0.00550	-0.15240	0.07604	-0.09188	0.02154	0.00089	0.04463
VARIABLE 30 0.34797	-0.18278	-0.13093	<u>-0.40532</u>	0.11382	-0.25271	<u>-0.58887</u>	-0.04592	0.07135

7.853*	2.203	2.091	1.876	1.386	1.305	1.124	1.065	0.964
26.24**	33.5%	40.5%	46.7%	51.4%	55.7%	59.5%	63.0%	66.2%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-7

ROTATED FACTOR MATRIX FOR JU-F (KOR)

VARIABLE 1 0.35940	0.25022	0.12415	<u>0.42354</u>	0.19002	<u>0.45845</u>	-0.19656	0.00039	-0.16361
VARIABLE 2 -0.01018	-0.16261	-0.07718	<u>0.46178</u>	0.05514	0.30984	-0.06821	0.33114	-0.09264
VARIABLE 3 -0.20852	0.00924	-0.32441	<u>0.48152</u>	0.36445	0.03684	0.07461	0.39327	-0.19634
VARIABLE 4 -0.14358	-0.11082	0.12563	<u>0.43930</u>	0.26358	-0.27249	0.01856	0.26088	<u>-0.57253</u>
VARIABLE 5 0.36106	0.14605	-0.22757	0.38955	0.35718	0.10207	<u>-0.40640</u>	0.02301	0.12635
VARIABLE 6 <u>0.57331</u>	0.17827	-0.12673	0.36773	0.29907	<u>-0.40402</u>	-0.06324	0.08245	-0.04951
VARIABLE 7 0.13142	0.20410	-0.01173	<u>0.52103</u>	<u>-0.52365</u>	-0.05395	-0.10762	-0.34933	-0.32660
VARIABLE 8 0.13347	-0.10835	0.04074	<u>0.51973</u>	-0.18115	-0.23640	-0.29274	0.32360	-0.33646
VARIABLE 9 0.20566	0.06331	-0.00662	0.22565	<u>0.44329</u>	<u>-0.55047</u>	-0.18123	0.19456	-0.09893
VARIABLE 10 0.20337	0.02007	0.27975	<u>0.52134</u>	0.22009	0.08907	-0.28266	0.12418	0.08753
VARIABLE 11 -0.22342	0.08693	-0.30358	0.38575	-0.07418	0.03523	-0.27961	<u>0.56313</u>	-0.07156
VARIABLE 12 0.10166	-0.06357	<u>0.48318</u>	0.21514	<u>0.41801</u>	0.12069	-0.35612	0.08886	<u>-0.40921</u>
VARIABLE 13 -0.29804	0.33900	-0.27512	0.18306	<u>0.45177</u>	0.02967	<u>-0.45211</u>	-0.06872	-0.28465
VARIABLE 14 0.15769	<u>0.52662</u>	-0.49793	-0.20876	0.19851	-0.00725	-0.31500	0.30233	-0.11924
VARIABLE 15 0.05207	-0.13910	<u>-0.53377</u>	0.38737	0.14002	0.05451	-0.22056	0.23320	-0.29651
VARIABLE 16 0.26492	0.21710	-0.02965	0.30645	0.24034	0.22280	<u>-0.57513</u>	0.05533	-0.15944
VARIABLE 17 0.05464	<u>-0.46314</u>	-0.02611	0.02268	-0.13892	0.09380	<u>-0.52238</u>	0.33343	-0.31336
VARIABLE 18 0.15806	-0.10663	0.07665	0.17862	<u>-0.23894</u>	0.05315	<u>-0.48308</u>	<u>0.43367</u>	-0.27300
VARIABLE 19 -0.08944	-0.02719	-0.23087	<u>0.50092</u>	0.11128	-0.30285	-0.38454	-0.10326	0.35254
VARIABLE 20 0.04291	0.16926	0.33587	0.09375	0.12043	-0.09188	-0.22553	<u>0.49579</u>	<u>-0.48057</u>
VARIABLE 21 -0.38715	0.35497	0.16431	0.12835	-0.16000	-0.30133	-0.29323	<u>0.53724</u>	0.07313
VARIABLE 22 0.20958	0.03859	-0.06970	0.36704	0.16623	0.06737	<u>-0.56566</u>	<u>0.40144</u>	0.12849
VARIABLE 23 0.34377	0.03401	0.17293	0.29253	<u>0.42247</u>	0.09104	<u>-0.50051</u>	0.17367	0.20235
VARIABLE 24 0.11459	<u>-0.41623</u>	0.04656	0.18974	0.16845	-0.19331	-0.28884	<u>0.49403</u>	-0.30177
VARIABLE 25 0.31766	0.31563	0.09929	0.21013	<u>0.42193</u>	0.03427	-0.23057	<u>0.45626</u>	-0.24185
VARIABLE 26 0.00968	-0.07467	-0.05667	<u>0.48315</u>	<u>0.47311</u>	0.23022	<u>-0.49814</u>	-0.13762	-0.02335
VARIABLE 27 -0.07873	-0.25224	-0.06912	0.05584	-0.10015	<u>-0.42505</u>	<u>-0.48236</u>	0.25619	-0.26756
VARIABLE 28 <u>0.42702</u>	0.01608	-0.15954	0.03137	0.37811	-0.00226	<u>-0.46184</u>	0.08490	<u>-0.42532</u>
VARIABLE 29 0.24727	0.12741	0.36784	0.14480	<u>0.53023</u>	0.19119	<u>-0.42022</u>	-0.07833	-0.23458
VARIABLE 30 -0.26372	0.09572	-0.14594	<u>0.42587</u>	<u>0.42825</u>	-0.06690	<u>-0.50531</u>	-0.00047	-0.07901
9.470*	2.800	2.044	1.689	1.304	1.262	1.163	1.118	0.993
31.68**	40.9%	47.7%	53.3%	57.7%	61.9%	65.8%	69.5%	72.8%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-8
ROTATED FACTOR MATRIX FOR JU-F (N.Z.)

VARIABLE 1 0.20013	0.09199	0.17470	0.09771	0.14664	-0.17231	-0.11795	-0.07955	<u>0.79729</u>	0.01870
VARIABLE 2 -0.12672	-0.38493	-0.10249	0.33891	<u>0.58718</u>	-0.17116	-0.16313	0.04941	-0.00249	0.09012
VARIABLE 3 0.11626	-0.20465	-0.22655	<u>0.73664</u>	0.02399	0.10538	0.03020	0.07527	0.37913	-0.12027
VARIABLE 4 0.10453	-0.27085	0.11604	<u>0.50136</u>	0.24352	0.30047	-0.10501	-0.02511	-0.00567	-0.45244
VARIABLE 5 0.07017	0.15241	0.20168	<u>0.70600</u>	0.03221	0.09798	-0.27405	0.19523	-0.08129	0.21573
VARIABLE 6 0.08357	-0.03515	<u>0.79128</u>	0.09197	-0.02032	0.12797	0.02965	-0.00885	0.17290	0.10996
VARIABLE 7 0.09406	-0.18742	0.14437	0.06375	0.06427	<u>0.86240</u>	-0.18367	0.25879	<u>0.58766</u>	0.05920
VARIABLE 8 0.08932	0.02448	0.11414	-0.03734	0.16364	<u>0.54131</u>	-0.01347	0.25493	-0.02534	-0.27968
VARIABLE 9 0.24985	-0.00206	-0.00737	-0.03727	<u>0.80630</u>	-0.04944	-0.07350	0.05354	0.14269	0.07495
VARIABLE 10 0.19690	-0.15646	0.16567	0.05965	0.24080	0.02312	0.00532	0.03307	-0.01727	<u>0.74876</u>
VARIABLE 11 0.12211	-0.69908	0.05877	0.26279	0.08573	0.06867	0.14563	-0.12477	0.11697	0.31894
VARIABLE 12 0.71423	0.08994	-0.08844	0.08783	0.01153	0.04488	-0.07157	-0.01365	0.22749	<u>0.40212</u>
VARIABLE 13 -0.04183	-0.32962	-0.50497	0.18503	0.08845	<u>0.50407</u>	-0.03841	-0.03677	-0.01999	0.05526
VARIABLE 14 0.17934	-0.33565	0.09924	-0.14133	-0.07580	-0.04358	-0.13100	<u>-0.65594</u>	0.06979	0.24865
VARIABLE 15 0.00068	-0.80462	-0.08381	-0.03179	0.04985	-0.10338	-0.16686	0.09774	-0.01510	-0.12615
VARIABLE 16 -0.00190	-0.03374	-0.03656	<u>0.45873</u>	-0.17605	-0.05816	-0.27219	-0.33147	0.32682	<u>0.45246</u>
VARIABLE 17 0.61067	-0.26766	-0.07241	0.06745	-0.05220	-0.11975	-0.29797	0.25198	0.12277	-0.30089
VARIABLE 18 0.05344	-0.32523	0.11377	0.01821	-0.01166	-0.02299	-0.24256	0.23882	0.06006	0.13561
VARIABLE 19 0.13954	-0.25599	0.15123	0.25232	-0.21769	0.04209	-0.08417	<u>0.66081</u>	-0.02618	0.06297
VARIABLE 20 0.71161	0.11652	0.14702	0.01573	0.09996	0.08860	0.01944	0.00764	0.17292	0.05970
VARIABLE 21 0.54451	-0.57660	0.00384	-0.00361	0.07485	0.21463	0.01320	-0.00792	-0.15432	0.04510
VARIABLE 22 0.46503	-0.05329	-0.11777	-0.07021	0.27939	-0.03626	-0.10727	<u>0.61470</u>	0.06573	0.07834
VARIABLE 23 0.40757	-0.03569	0.11131	-0.21427	0.07063	0.26831	-0.14607	<u>0.53183</u>	0.25660	0.06138
VARIABLE 24 0.32582	-0.26863	0.11829	<u>0.42052</u>	0.23048	-0.02367	-0.00128	0.00739	-0.18186	0.11578
VARIABLE 25 0.37041	-0.00641	-0.05315	0.18601	0.09293	-0.01107	<u>-0.73104</u>	-0.07784	0.05057	0.09052
VARIABLE 26 -0.06785	-0.16017	0.11396	0.05276	0.14650	0.18315	<u>-0.71902</u>	0.10653	0.07204	-0.26273
VARIABLE 27 0.54623	-0.13156	-0.00498	0.26578	-0.03193	<u>0.49884</u>	-0.08697	0.04925	-0.04240	-0.10510
VARIABLE 28 0.00514	0.21407	0.05130	0.06352	-0.29229	<u>0.75764</u>	-0.27020	0.00927	-0.03958	0.08657
VARIABLE 29 0.24085	0.04164	-0.16843	-0.00020	-0.13127	0.23984	<u>-0.63797</u>	0.20170	0.26608	0.33969
VARIABLE 30 -0.08189	-0.01860	-0.43990	0.13822	<u>0.44244</u>	0.28776	<u>-0.53361</u>	-0.17140	0.02317	0.05771

6.375*	2.695	2.391	2.285	1.762	1.563	1.277	1.230	1.098	0.996
21.38**	30.24	38.28	45.88	51.78	56.98	61.28	65.38	68.98	72.28

* Eigen values ** Cumulative percentage of Eigenvalues

Appendix 15-10

ROTATED FACTOR MATRIX FOR SU-M (N.Z.)

VARIABLE 1 0.47713	0.04484	0.18891	0.08597	-0.06175	-0.11382	<u>0.52260</u>	-0.01206
VARIABLE 2 0.76502	0.24801	-0.07078	0.00856	0.03484	-0.17259	0.15870	0.06090
VARIABLE 3 0.55223	0.06560	0.09050	0.07764	<u>-0.57694</u>	-0.00528	0.04717	0.02395
VARIABLE 4 0.45198	0.32473	0.29678	0.13077	-0.01783	<u>0.40520</u>	-0.21205	0.17256
VARIABLE 5 0.57784	0.03043	0.25336	0.17006	-0.12539	0.06231	0.03760	-0.06676
VARIABLE 6 0.17190	0.09022	0.10885	0.30143	-0.14026	<u>-0.71008</u>	0.03982	0.05994
VARIABLE 7 0.16676	0.18366	0.09931	0.17865	-0.16050	0.05937	<u>0.76907</u>	-0.11191
VARIABLE 8 0.01302	<u>0.65394</u>	0.10442	0.16333	-0.21807	-0.01681	0.10542	-0.14478
VARIABLE 9 0.05806	-0.00755	0.13819	0.12097	<u>-0.71819</u>	-0.21235	0.27303	0.05967
VARIABLE 10 0.13470	0.23427	0.37165	0.32715	-0.07204	-0.10068	0.02114	<u>-0.47145</u>
VARIABLE 11 0.08238	0.15728	0.14337	0.04884	-0.08608	-0.02733	0.06207	<u>-0.82582</u>
VARIABLE 12 0.12468	0.28291	<u>0.70054</u>	0.19126	-0.25805	0.07387	0.08161	-0.20571
VARIABLE 13 0.17376	0.13486	0.05608	0.09713	<u>-0.75860</u>	0.00845	-0.04139	-0.24425
VARIABLE 14 0.12331	<u>0.58285</u>	0.11522	-0.34876	-0.12647	-0.33173	-0.22569	-0.16350
VARIABLE 15 0.30902	<u>0.46357</u>	-0.05895	0.20258	-0.09661	0.09476	0.06544	-0.36302
VARIABLE 16 0.55819	0.02836	0.34379	0.08763	-0.03909	-0.00689	0.18664	-0.35388
VARIABLE 17 0.07894	<u>0.75765</u>	0.29892	0.04361	0.00692	-0.07288	0.19401	-0.11929
VARIABLE 18 0.03006	<u>0.61441</u>	0.33690	0.10469	-0.20625	-0.07988	-0.02461	-0.11974
VARIABLE 19 0.31838	0.04179	0.10369	<u>0.58274</u>	-0.09289	<u>0.04653</u>	<u>0.34038</u>	<u>-0.10565</u>
VARIABLE 20 0.05060	0.31944	<u>0.60361</u>	0.13865	0.07985	-0.14227	0.13384	-0.09978
VARIABLE 21 0.14682	<u>0.75221</u>	0.01137	-0.02138	0.13001	-0.10631	0.06509	-0.00355
VARIABLE 22 0.00499	0.14806	0.11922	<u>0.80534</u>	-0.08626	-0.15070	-0.03754	0.01420
VARIABLE 23 0.16846	0.09821	0.19091	<u>0.65043</u>	-0.08474	-0.07160	0.09785	-0.13327
VARIABLE 24 0.10777	<u>0.66582</u>	0.26323	0.19947	0.09310	0.19535	-0.05145	-0.01399
VARIABLE 25 0.16582	0.14915	<u>0.73995</u>	0.18790	-0.12240	0.05352	0.07000	-0.06630
VARIABLE 26 0.03444	0.21118	0.12115	<u>0.43947</u>	-0.20037	-0.22051	0.13049	-0.17245
VARIABLE 27 0.51823	<u>0.51475</u>	0.03099	0.17736	-0.21534	0.02324	-0.01380	0.01559
VARIABLE 28 0.24932	0.15398	<u>0.42203</u>	0.07662	0.05861	<u>-0.49462</u>	-0.32625	-0.27198
VARIABLE 29 0.33951	0.07427	<u>0.72355</u>	-0.00610	-0.07463	-0.20435	0.03647	-0.00562
VARIABLE 30 0.63842	-0.09430	0.16727	0.18545	-0.21926	-0.22644	0.12815	-0.10497
8.362*	2.655	1.728	1.568	1.362	1.239	1.088	1.015
27.94**	36.74	42.54	47.74	52.24	56.44	60.04	63.44

* Eigenvalues ** Cumulative percentage of Eigenvalues

KEY FOR VARIABLES

- | | | |
|---------------------------|--------------------|---------------------|
| 1. Active | 2. Ambitious | 3. Capable |
| 4. Clean | 5. Courageous | 6. Creative |
| 7. Healthy | 8. Honest | 9. Intelligent |
| 10. Optimistic | 11. Patient | 12. Pleasant |
| 13. Rational | 14. Religious | 15. Self-controlled |
| 16. Capable of Leadership | | 17. Considerate |
| 18. Helpful | 19. Independent | 20. Loving |
| 21. Obedient | 22. Open-Minded | 23. Pliable |
| 24. Polite | 25. Popular | 26. Progressive |
| 27. Responsible | 28. Self-Revealing | 29. Sociable |
| 30. Successful | | |

Appendix 15-11
ROTATED FACTOR MATRIX FOR SU-F (KOR)

VARIABLE 1 0.10447	0.04153	0.24511	0.23286	-0.04389	-0.47873	0.18436	-0.56497	-0.18429
VARIABLE 2 0.16572	0.26889	0.42745	0.28873	-0.07274	-0.27533	-0.13677	-0.28713	-0.47218
VARIABLE 3 0.05525	0.20541	-0.29168	0.58393	0.24452	-0.21992	-0.35883	-0.15394	-0.18798
VARIABLE 4 0.03718	-0.12707	-0.10645	0.10263	0.37688	0.51087	-0.13693	-0.38357	-0.18529
VARIABLE 5 0.046026	0.12354	-0.09514	0.40877	0.05977	-0.00404	0.02783	-0.22605	-0.60325
VARIABLE 6 0.15358	0.10947	0.00038	0.50161	0.36834	0.10901	-0.08799	-0.23512	-0.41561
VARIABLE 7 0.42793	-0.02543	-0.17071	0.32868	-0.44326	0.07766	-0.08369	-0.36788	0.08427
VARIABLE 8 0.07262	-0.36014	-0.31859	0.32695	-0.23504	0.39833	-0.20178	0.01847	-0.14816
VARIABLE 9 0.11174	-0.08662	-0.00293	-0.44075	-0.3891	-0.00106	-0.41531	-0.23320	-0.00029
VARIABLE 10 0.17958	0.39047	0.17297	0.42386	-0.09171	0.20468	0.07242	-0.40208	0.40544
VARIABLE 11 0.18807	0.21626	0.01564	-0.08605	-0.28452	0.58923	-0.30406	-0.22020	-0.34239
VARIABLE 12 0.10754	-0.12846	0.13632	0.16237	-0.15297	-0.03655	-0.00263	-0.77406	0.23517
VARIABLE 13 0.33076	-0.39358	-0.12435	0.30749	-0.17189	-0.00161	-0.49719	-0.07980	0.08140
VARIABLE 14 0.10597	0.16285	0.32641	-0.16234	-0.48556	0.28203	-0.08666	-0.18711	-0.42788
VARIABLE 15 0.12040	-0.19699	0.10511	0.26396	-0.28887	0.49420	-0.32892	0.26657	-0.29127
VARIABLE 16 0.47274	0.02703	0.10658	0.32053	-0.11557	-0.30290	-0.04110	-0.39742	-0.27012
VARIABLE 17 0.14593	-0.34185	-0.14025	0.06629	-0.01116	0.51826	0.23522	-0.05781	-0.16593
VARIABLE 18 0.19024	-0.05969	-0.12871	0.11170	-0.28415	0.64325	0.01103	-0.12795	0.06934
VARIABLE 19 0.23010	0.09462	-0.26147	0.32230	0.27120	-0.05012	-0.17564	0.03417	-0.40405
VARIABLE 20 0.21500	-0.04757	0.12342	0.19642	-0.05105	0.38335	0.37865	-0.38080	0.18271
VARIABLE 21 0.31582	0.02287	-0.08205	-0.12384	0.00992	0.73380	-0.05715	-0.24371	0.01969
VARIABLE 22 0.59256	0.21198	0.01077	0.13917	-0.07413	0.46851	-0.13747	-0.34976	0.04515
VARIABLE 23 0.44920	0.35284	0.05456	0.56638	-0.08320	0.17549	0.19539	0.06582	0.10905
VARIABLE 24 0.04211	-0.17533	-0.10850	0.34800	-0.01105	0.66783	0.22299	-0.16350	-0.13724
VARIABLE 25 0.09300	0.25139	0.41461	0.28842	0.19130	0.31271	-0.21824	-0.27234	-0.26749
VARIABLE 26 0.05497	0.07836	0.28839	0.43950	-0.00998	-0.27553	-0.27395	-0.34557	-0.26399
VARIABLE 27 0.16357	-0.31094	0.24425	0.05269	0.10316	0.25898	-0.44411	-0.41668	-0.14902
VARIABLE 28 0.02960	-0.10164	0.58056	0.29118	0.04174	-0.33022	0.20732	-0.34129	-0.28118
VARIABLE 29 0.22236	-0.09708	0.55364	0.28767	-0.28823	-0.14169	0.34175	-0.32681	-0.05696
VARIABLE 30 0.07834	0.36945	0.13129	0.49847	-0.02109	-0.15189	-0.31960	-0.05120	-0.24853
6.202*	4.178	2.590	1.593	1.333	1.317	1.267	1.156	0.997
20.78**	34.6%	43.2%	48.5%	53.0%	57.4%	61.6%	65.5%	68.8%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-12

ROTATED FACTOR MATRIX FOR SU-F (N.Z.)

VARIABLE 1 0.31406	<u>-0.50396</u>	0.28280	-0.00932	-0.04532	-0.14506	<u>-0.43083</u>	0.21137	-0.05962
VARIABLE 2 0.03731	0.03556	0.12249	-0.01088	0.08591	<u>-0.76115</u>	<u>-0.18457</u>	-0.23457	0.35218
VARIABLE 3 0.09978	-0.09650	-0.03977	-0.01165	<u>-0.46669</u>	-0.08267	<u>-0.63496</u>	-0.13472	0.13437
VARIABLE 4 0.08910	-0.04308	0.11233	0.12469	-0.01881	0.14704	<u>-0.81785</u>	-0.07500	0.17514
VARIABLE 5 0.12536	<u>-0.77216</u>	0.12959	-0.05028	-0.00840	0.14259	-0.04689	-0.17866	-0.17272
VARIABLE 6 0.11735	<u>-0.76244</u>	-0.16892	0.12254	-0.11104	0.08228	-0.12306	0.04827	0.28361
VARIABLE 7 0.00672	0.01076	<u>0.82569</u>	0.24385	-0.15109	-0.02845	-0.15154	0.05960	0.01215
VARIABLE 8 -0.01394	-0.06935	0.10714	0.14961	-0.14049	0.01952	-0.22678	<u>-0.79757</u>	-0.00923
VARIABLE 9 0.16095	-0.10268	0.12272	-0.33083	<u>-0.54138</u>	0.11819	-0.09017	<u>-0.51783</u>	0.03728
VARIABLE 10 0.30238	-0.11437	<u>0.73552</u>	0.03159	0.03597	0.21986	0.11963	-0.18683	0.13499
VARIABLE 11 -0.18437	-0.19307	0.13617	0.13161	-0.21733	0.04132	<u>-0.64371</u>	-0.13623	-0.06328
VARIABLE 12 0.16905	0.30800	<u>0.46636</u>	0.05330	<u>-0.43776</u>	0.19007	-0.34305	-0.24097	0.11098
VARIABLE 13 -0.01274	-0.06815	0.06350	0.06940	<u>-0.60745</u>	0.04555	-0.13292	-0.02099	-0.02006
VARIABLE 14 0.08893	0.01613	0.16361	<u>0.87475</u>	0.03966	0.05528	-0.02043	-0.03932	0.02262
VARIABLE 15 -0.07777	-0.23070	0.14265	<u>0.62398</u>	-0.32468	-0.01208	-0.31255	-0.14748	0.06176
VARIABLE 16 0.02016	-0.22580	0.38444	0.08370	-0.05184	-0.09765	-0.04055	-0.26020	0.00942
VARIABLE 17 0.48077	-0.03050	-0.15873	-0.00921	-0.11704	-0.04389	<u>-0.67648</u>	-0.38515	0.12507
VARIABLE 18 0.00572	0.22332	-0.16613	0.04577	-0.16020	0.10273	<u>-0.51520</u>	-0.25483	0.17847
VARIABLE 19 0.22401	<u>-0.50952</u>	0.26189	0.14456	<u>-0.51211</u>	0.13304	-0.12938	-0.14672	0.03447
VARIABLE 20 0.30916	-0.10169	0.17690	-0.00454	-0.21263	0.22578	-0.02495	-0.23509	<u>-0.45491</u>
VARIABLE 21 -0.01033	0.37639	0.02681	0.37798	0.19764	-0.19483	-0.05499	-0.37053	<u>0.45351</u>
VARIABLE 22 0.30084	-0.31314	-0.16034	-0.06824	<u>-0.48123</u>	0.00290	-0.22431	<u>-0.50493</u>	-0.01605
VARIABLE 23 0.07699	-0.10609	0.17900	0.00236	<u>-0.47942</u>	<u>0.45271</u>	-0.23746	-0.39650	0.04676
VARIABLE 24 0.15880	0.29829	0.08985	0.30619	-0.15916	0.27440	-0.18397	<u>-0.58032</u>	0.36726
VARIABLE 25 0.19958	-0.21134	0.19667	0.16235	-0.08263	<u>0.71328</u>	-0.10453	-0.19276	0.22708
VARIABLE 26 0.02819	-0.39761	-0.08086	0.00860	<u>-0.44935</u>	0.05399	0.08489	0.13755	0.08668
VARIABLE 27 0.30801	0.17351	0.04054	0.16841	<u>-0.57655</u>	0.03565	-0.23984	-0.30568	0.35742
VARIABLE 28 0.23750	-0.01219	0.14769	-0.21684	0.01043	<u>0.57363</u>	-0.37118	-0.29531	0.15129
VARIABLE 29 0.74064	-0.21110	0.26096	-0.01286	0.02072	0.29756	-0.13774	0.08280	0.10414
VARIABLE 30 0.14347	-0.16843	0.20066	0.00324	-0.24186	0.09374	-0.25756	-0.06620	<u>0.76509</u>
8.458*	3.137	2.243	1.992	1.684	1.384	1.241	1.139	1.032
28.24**	38.64	46.14	52.74	58.48	63.04	67.18	70.94	74.44

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-14

ROTATED FACTOR MATRIX FOR HS-XN (N.Z.)

VARIABLE 1 0.03164	-0.12896	0.29410	-0.33930	0.11514	-0.20815	0.10736	-0.59605	-0.18338
VARIABLE 2 -0.20633	-0.02321	-0.27852	<u>0.40961</u>	0.22339	0.05745	0.36591	-0.32426	0.06938
VARIABLE 3 0.01089	-0.04473	0.20345	0.25420	0.36371	-0.17357	<u>0.40182</u>	-0.27495	<u>0.42643</u>
VARIABLE 4 -0.28979	0.13177	-0.25400	-0.19850	<u>0.45600</u>	-0.11369	0.30662	-0.26890	0.28805
VARIABLE 5 -0.28938	-0.24113	<u>0.43889</u>	-0.31126	-0.04347	-0.23698	0.24788	-0.09175	0.32744
VARIABLE 6 -0.47470	0.11122	0.21757	0.01297	<u>-0.40052</u>	0.13054	0.30440	0.02360	<u>0.40586</u>
VARIABLE 7 -0.08471	-0.09644	0.18777	<u>-0.46863</u>	0.14958	-0.27573	0.15179	<u>-0.57149</u>	0.01569
VARIABLE 8 0.14351	0.24208	-0.26871	<u>-0.17974</u>	0.21669	-0.21032	<u>0.57653</u>	0.13029	0.09965
VARIABLE 9 0.20500	-0.23693	0.20149	0.26844	0.16946	-0.35189	<u>0.47555</u>	-0.09315	0.17961
VARIABLE 10 0.27574	<u>0.44315</u>	0.30562	-0.05700	-0.09223	-0.08098	0.03092	-0.32866	0.18301
VARIABLE 11 -0.04437	<u>0.53866</u>	0.15027	0.09522	-0.04416	-0.33788	<u>0.47801</u>	0.01439	-0.16674
VARIABLE 12 0.36834	0.32534	0.33027	-0.09228	0.32840	-0.13883	0.36953	-0.17701	0.22315
VARIABLE 13 0.08131	-0.11920	0.25532	0.18094	0.03798	-0.19057	<u>0.44134</u>	-0.31521	0.11802
VARIABLE 14 0.17847	0.09983	0.08578	-0.09803	0.23204	0.01863	<u>0.43027</u>	<u>0.52782</u>	-0.28239
VARIABLE 15 -0.11383	0.21276	-0.00908	0.03661	0.02754	-0.23807	<u>0.59812</u>	-0.26607	-0.39299
VARIABLE 16 0.15075	-0.35817	0.33504	-0.05100	-0.09978	0.14044	0.39536	-0.32963	0.05116
VARIABLE 17 0.19061	0.11300	-0.08550	-0.28403	0.21707	0.00362	<u>0.66351</u>	0.00473	0.17543
VARIABLE 18 0.19224	0.06366	-0.25452	-0.13701	0.26154	-0.02222	<u>0.68518</u>	-0.04143	0.10312
VARIABLE 19 0.13664	-0.21238	-0.09795	-0.35007	-0.32051	-0.11925	0.39614	-0.09074	0.26168
VARIABLE 20 0.13622	0.35242	0.16427	-0.20857	0.19125	0.36556	0.29313	-0.22025	0.33955
VARIABLE 21 0.01766	<u>0.42439</u>	-0.32256	-0.04010	0.05908	-0.17269	<u>0.49020</u>	-0.16310	-0.07146
VARIABLE 22 0.06815	0.02223	0.04028	-0.03165	-0.37257	0.01769	0.27392	-0.36482	<u>0.45342</u>
VARIABLE 23 <u>0.44462</u>	0.15446	-0.21003	-0.03634	-0.34861	-0.31139	0.18141	-0.23321	0.38254
VARIABLE 24 0.14764	0.28484	<u>-0.41628</u>	-0.25577	0.17093	-0.06868	<u>0.43830</u>	-0.32616	0.09357
VARIABLE 25 0.06318	0.15383	0.36164	-0.14619	0.24104	0.16367	0.25167	<u>-0.51561</u>	0.17402
VARIABLE 26 0.08396	0.02102	-0.07396	0.22296	-0.03810	0.31628	<u>0.48918</u>	<u>-0.40694</u>	0.16689
VARIABLE 27 -0.08847	0.12437	-0.19427	-0.01525	0.09363	0.13719	<u>0.51267</u>	<u>-0.44300</u>	0.11374
VARIABLE 28 0.11239	-0.00038	0.03302	-0.27125	-0.23496	<u>0.59315</u>	0.31345	-0.27715	-0.09828
VARIABLE 29 0.21657	0.33879	0.15821	-0.24480	0.15732	0.38050	0.15863	-0.37471	0.38703
VARIABLE 30 0.08611	-0.23905	0.08812	0.30240	0.12126	0.24059	<u>0.48003</u>	<u>-0.47943</u>	0.05803
7.446*	2.683	1.784	1.626	1.380	1.204	1.166	1.017	0.970
24.8%**	33.8%	39.7%	45.1%	49.7%	53.7%	57.6%	61.0%	64.2%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-15

ROTATED FACTOR MATRIX FOR HS-NB (KOR)

VARIABLE 1 -0.06816	0.38529	-0.15806	-0.19482	-0.42738	0.09538	-0.23737	-0.13315	-0.15683	-0.46345
VARIABLE 2 -0.34244	0.41579	-0.14256	0.07872	-0.08654	0.23657	-0.30817	0.14103	-0.08713	-0.36013
VARIABLE 3 -0.29313	0.25540	0.00067	0.37631	-0.13350	0.42101	-0.17224	-0.10543	-0.35866	-0.16778
VARIABLE 4 0.02161	0.15626	0.30448	0.22840	0.32247	0.49802	-0.13033	0.07055	-0.34053	0.04768
VARIABLE 5 0.15238	0.39303	-0.00029	0.27716	-0.16302	0.19391	-0.27529	-0.34329	0.09125	-0.37675
VARIABLE 6 0.12146	0.31456	-0.11413	0.34797	0.40546	0.21565	-0.22668	-0.29808	-0.12801	-0.34672
VARIABLE 7 0.09324	0.66944	0.37527	-0.27751	-0.02978	-0.06712	-0.19177	0.16842	-0.26793	0.16923
VARIABLE 8 -0.17948	0.11616	0.38736	0.41184	0.24909	-0.07543	-0.24831	-0.07525	-0.41628	0.06277
VARIABLE 9 0.00848	-0.13897	0.29089	0.13848	-0.17438	0.34204	-0.51719	0.04201	-0.16284	-0.82256
VARIABLE 10 0.20466	-0.07459	0.24483	-0.10497	-0.16902	-0.06286	-0.61446	-0.02751	0.11400	-0.30198
VARIABLE 11 0.04056	-0.09747	0.26453	0.41229	-0.33413	0.04563	-0.28640	-0.06037	-0.26862	-0.02444
VARIABLE 12 0.17542	0.15420	0.27190	-0.19090	-0.02227	-0.22090	-0.54453	-0.10323	-0.08743	-0.21955
VARIABLE 13 0.15985	0.14479	0.14348	0.09611	0.21093	0.26171	-0.30123	-0.53442	0.17032	-0.11619
VARIABLE 14 -0.35141	0.31305	0.14848	0.14214	-0.01525	-0.45292	-0.29085	-0.36299	0.26320	0.04221
VARIABLE 15 -0.00428	0.00136	0.37658	0.47317	-0.22033	0.06182	-0.03657	-0.47572	-0.02821	-0.05667
VARIABLE 16 -0.00611	0.42264	-0.25865	-0.04004	-0.14459	0.18282	-0.17145	-0.36225	-0.15322	-0.36963
VARIABLE 17 -0.03650	-0.01544	0.22100	-0.21612	0.18431	0.00367	0.21698	-0.39556	-0.41817	-0.42861
VARIABLE 18 0.00370	0.27904	0.38739	0.03419	0.11973	0.10460	0.23819	-0.12884	0.10966	-0.44012
VARIABLE 19 -0.10375	0.22297	0.26640	0.46374	0.10652	-0.03165	-0.07761	0.12323	-0.00725	-0.52905
VARIABLE 20 -0.07106	0.26039	-0.03378	-0.15403	0.15777	-0.07250	-0.02366	-0.38076	-0.45105	-0.28514
VARIABLE 21 -0.12135	0.13726	0.35500	0.25061	-0.08068	0.07851	-0.04379	-0.49953	-0.29034	0.07995
VARIABLE 22 0.33013	0.13209	0.15538	0.06777	-0.29771	-0.22778	-0.15254	-0.42566	-0.38433	-0.26285
VARIABLE 23 0.18422	0.08256	-0.26609	0.08419	0.12012	-0.19161	-0.34847	-0.04333	-0.47716	-0.48375
VARIABLE 24 -0.29604	-0.10738	0.34398	-0.11269	-0.19683	0.37047	-0.29446	-0.21001	-0.36098	-0.26038
VARIABLE 25 0.14011	0.09941	-0.19940	0.03647	-0.21302	0.00895	-0.35161	-0.26012	-0.49621	-0.28849
VARIABLE 26 -0.06878	0.23595	0.01876	0.50991	-0.18941	-0.24801	-0.30272	-0.03245	-0.12427	-0.46823
VARIABLE 27 -0.57699	-0.00136	0.27156	0.29016	-0.01516	-0.03147	-0.00910	0.03293	-0.25365	-0.38570
VARIABLE 28 -0.28936	0.13948	-0.33066	-0.15643	-0.02833	0.05821	-0.44396	-0.22390	0.03635	-0.33214
VARIABLE 29 -0.02602	0.10757	-0.18691	-0.30560	0.15376	-0.15435	-0.51339	-0.26612	-0.07339	-0.38590
VARIABLE 30 -0.35891	0.03335	0.01610	0.06849	0.25227	0.26617	-0.57211	-0.04396	-0.11264	-0.14663
7.395*	2.575	1.675	1.594	1.432	1.232	1.180	1.006	1.003	0.960
24.78**	33.28	38.88	44.18	48.98	53.08	56.98	60.38	63.68	66.88

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-16

ROTATED FACTOR MATRIX FOR HS-NB (N.Z.)

VARIABLE 1	<u>-0.44961</u>	-0.06290	0.15301	-0.21296	0.27414	-0.38414	<u>-0.56930</u>	-0.05651	0.09557
VARIABLE 2	-0.15836	0.00242	0.26797	-0.04220	-0.14796	-0.10568	<u>-0.47090</u>	-0.21983	<u>0.41303</u>
VARIABLE 3	-0.24413	0.13798	0.11618	-0.18010	0.00388	-0.17187	<u>-0.63410</u>	0.03807	<u>0.43765</u>
VARIABLE 4	-0.24656	-0.36195	0.05662	0.03092	0.12757	-0.09911	-0.35696	0.09294	<u>0.56653</u>
VARIABLE 5	-0.08435	<u>-0.50740</u>	0.25195	0.05134	-0.17179	-0.17361	-0.25591	0.21113	-0.20342
VARIABLE 6	-0.29246	0.28078	0.03340	-0.04374	<u>-0.60767</u>	-0.05123	<u>-0.45552</u>	0.09208	-0.00410
VARIABLE 7	-0.12204	-0.49633	-0.17670	<u>0.43424</u>	-0.22378	0.39455	-0.28142	-0.13554	-0.05754
VARIABLE 8	0.01616	0.15753	-0.22959	0.18777	0.11467	-0.25854	<u>-0.51832</u>	0.05039	-0.19167
VARIABLE 9	0.15753	0.15141	-0.16713	-0.10184	0.09431	0.06499	<u>-0.64587</u>	0.26319	-0.02049
VARIABLE 10	-0.34847	-0.21970	<u>0.50158</u>	0.22731	0.26640	0.18963	-0.00126	0.18333	-0.15776
VARIABLE 11	-0.22937	-0.13739	-0.26933	0.36122	0.22923	-0.26273	<u>-0.48772</u>	0.29043	-0.26430
VARIABLE 12	0.04229	-0.37916	0.29392	0.36902	0.06573	0.07573	-0.22681	<u>0.49607</u>	0.07074
VARIABLE 13	0.12670	0.12045	-0.26623	0.11827	0.05240	-0.11308	<u>-0.58229</u>	0.31364	-0.16834
VARIABLE 14	-0.31177	0.11867	-0.34801	<u>0.95970</u>	-0.27092	-0.30496	0.09506	-0.11924	<u>-0.80076</u>
VARIABLE 15	-0.17878	-0.04028	-0.32230	0.03891	-0.11048	-0.36716	-0.38577	0.09170	-0.02589
VARIABLE 16	-0.19858	-0.07807	0.26489	0.34421	0.14462	-0.14834	<u>-0.56085</u>	0.15078	0.00738
VARIABLE 17	-0.09949	-0.35966	-0.26671	0.14352	-0.31118	-0.19085	-0.21425	0.27775	0.26029
VARIABLE 18	-0.32286	-0.33684	-0.28671	0.14352	-0.31118	-0.19085	-0.21425	0.27775	0.26029
VARIABLE 19	-0.35074	-0.20433	-0.07444	0.32635	-0.14151	-0.35452	-0.12520	0.30842	0.15059
VARIABLE 20	-0.27860	-0.28467	-0.08356	-0.18520	-0.31530	-0.06246	-0.03284	0.03821	<u>-0.43980</u>
VARIABLE 21	-0.09949	-0.10998	<u>0.42838</u>	0.18361	-0.39942	-0.04050	-0.05792	0.07950	0.23953
VARIABLE 22	-0.46200	0.16800	-0.08023	<u>0.61182</u>	0.24648	-0.13502	-0.06484	-0.16743	0.20451
VARIABLE 23	-0.34224	-0.26442	-0.39961	-0.06468	-0.06337	0.05987	0.00184	0.14629	<u>-0.44852</u>
VARIABLE 24	-0.44312	-0.30543	<u>-0.47518</u>	0.27323	-0.04363	0.18169	-0.02381	0.22258	-0.19949
VARIABLE 25	-0.30250	-0.07405	-0.24086	0.31124	0.28435	-0.07618	-0.27466	0.08089	0.21133
VARIABLE 26	-0.17723	0.05910	0.26412	0.17053	-0.20379	0.33184	-0.35163	0.23031	0.24990
VARIABLE 27	-0.37875	-0.04372	0.18872	-0.04430	0.16243	0.35169	-0.28534	0.24698	-0.00595
VARIABLE 28	-0.26632	0.08675	0.02142	0.06207	0.14995	0.04753	<u>-0.54069</u>	0.25149	0.06851
VARIABLE 29	-0.10889	0.33706	-0.06168	0.37530	<u>-0.40248</u>	<u>0.42391</u>	-0.08851	0.19310	-0.05305
VARIABLE 30	0.04057	-0.14686	0.17456	0.29364	-0.30069	0.24241	-0.21249	0.16786	0.22559
VARIABLE 30	-0.36672	0.08012	0.11640	0.25759	-0.03247	0.28110	<u>-0.58257</u>	0.06188	0.02450

8.053*	2.546	1.982	1.742	1.560	1.363	1.301	1.188	1.146	0.982
26.81**	35.38	41.98	47.78	52.98	57.58	61.88	65.88	69.68	72.98

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-17

ROTATED FACTOR MATRIX FOR JU-XN (KOR)

VARIABLE 1 0.34293	0.41951	-0.07103	-0.14599	0.00155	0.33312	0.30020	0.43675	0.17719
VARIABLE 2 0.13450	0.37396	0.31756	-0.01702	0.42849	0.31494	-0.16054	0.31703	0.13936
VARIABLE 3 0.22678	0.30999	0.47677	-0.03663	0.40650	-0.03225	-0.02393	0.35164	0.14622
VARIABLE 4 0.13241	-0.26476	0.51683	-0.09518	0.42040	0.22232	-0.28196	0.33880	-0.03028
VARIABLE 5 0.06070	-0.17296	-0.01202	-0.00143	0.36093	0.03102	0.37932	0.64642	-0.05699
VARIABLE 6 0.00194	0.23203	0.60222	0.05224	0.21739	-0.09216	0.16471	0.33609	0.31768
VARIABLE 7 0.07139	0.47396	0.10291	-0.24591	-0.10718	0.09952	-0.16445	0.11102	0.65284
VARIABLE 8 0.00846	0.01591	0.59656	-0.10715	0.15442	0.05246	-0.27011	0.46673	-0.05279
VARIABLE 9 0.51286	0.20205	0.52171	-0.04065	0.18270	-0.15624	0.10980	0.27283	-0.00505
VARIABLE 10 0.32303	-0.32013	0.13105	-0.21469	0.12078	0.11421	-0.01092	0.40343	0.47646
VARIABLE 11 0.06737	0.06967	0.03239	-0.44389	0.58531	0.05412	-0.39532	0.31421	0.17048
VARIABLE 12 0.02203	-0.23953	0.26766	-0.25796	0.13813	0.25732	0.15284	0.66823	0.12167
VARIABLE 13 0.06831	0.27580	0.47815	-0.14054	0.16513	-0.40241	0.43374	-0.03633	-0.26668
VARIABLE 14 0.07662	0.32716	0.03644	-0.61961	-0.05910	-0.24622	0.18315	0.29050	-0.36277
VARIABLE 15 0.18682	-0.00603	0.11309	-0.34674	0.55527	0.29498	-0.10200	0.32223	-0.26611
VARIABLE 16 0.17126	0.39282	0.10280	-0.20655	0.17143	0.11848	0.43581	0.61186	-0.11227
VARIABLE 17 0.28377	0.30005	0.03004	0.00061	0.02135	0.09708	-0.41366	0.44082	-0.43798
VARIABLE 18 0.37189	0.27339	-0.04169	-0.31738	-0.35585	0.27665	-0.35483	0.29205	-0.22169
VARIABLE 19 0.06828	0.39893	-0.10020	-0.04366	0.49565	-0.22917	0.23660	0.27894	0.18910
VARIABLE 20 0.08402	-0.12805	0.57425	-0.34246	-0.18749	0.19746	-0.01752	0.38758	-0.21150
VARIABLE 21 0.20330	-0.04468	0.27353	-0.63026	0.08638	0.33002	-0.15374	-0.39122	-0.10744
VARIABLE 22 0.30232	0.26312	0.04219	0.04540	0.12811	0.36855	-0.28651	0.51060	-0.29433
VARIABLE 23 0.32466	-0.05060	0.10199	0.08650	0.02147	0.33302	0.41954	0.56006	0.05564
VARIABLE 24 0.12230	-0.15164	-0.13848	0.15140	0.45069	0.40440	-0.22311	0.43607	-0.02591
VARIABLE 25 0.01177	0.06622	0.33548	-0.46670	-0.14648	0.11685	0.19361	0.42264	-0.30747
VARIABLE 26 0.17276	0.10808	0.02349	0.23716	0.16643	0.50074	0.43390	0.44582	0.00199
VARIABLE 27 0.03660	0.32596	0.16128	-0.38968	0.45249	0.30864	-0.23703	0.09655	0.04788
VARIABLE 28 0.12307	0.34413	0.30769	0.03869	-0.00831	0.43074	0.20554	0.41813	-0.32690
VARIABLE 29 0.04462	-0.04700	0.16558	-0.04909	-0.27821	0.14653	0.54560	0.66012	-0.03893
VARIABLE 30 0.22654	0.33140	0.24702	0.07562	0.29309	0.21462	-0.03012	0.53595	-0.03652
9.455*	2.974	2.305	1.927	1.591	1.321	1.173	1.010	0.961
31.56**	41.4%	49.1%	55.5%	60.8%	65.2%	69.2%	72.5%	75.7%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-21

ROTATED FACTOR MATRIX FOR SU-XN (KOR)

VARIABLE 1 0.36052	-0.20663	0.14537	-0.03531	-0.12472	-0.26373	-0.37181	-0.16481	-0.49965	0.24803
VARIABLE 2 0.33352	-0.14767	0.07115	-0.12523	-0.03820	-0.11342	-0.33565	-0.36830	-0.60246	0.14350
VARIABLE 3 0.27551	0.04152	0.18816	-0.23822	-0.16303	0.09082	-0.27404	-0.06912	-0.57368	0.26225
VARIABLE 4 0.25363	-0.04214	0.08132	0.03941	-0.33042	0.34180	0.24960	-0.12449	-0.43800	0.38408
VARIABLE 5 0.01659	-0.22185	0.03680	0.16371	-0.42803	-0.16574	-0.36020	-0.23902	-0.45749	-0.29186
VARIABLE 6 0.17257	-0.36468	0.09825	-0.59923	-0.22522	0.33188	-0.15492	-0.12356	-0.25689	-0.18469
VARIABLE 7 0.16887	0.27757	-0.17041	-0.15569	-0.52844	-0.34698	-0.18228	-0.04815	-0.22014	-0.08718
VARIABLE 8 0.18552	0.06303	-0.16976	-0.26188	-0.56226	0.00292	0.12775	0.41568	-0.29080	0.15522
VARIABLE 9 0.54164	-0.03030	0.30912	-0.12118	-0.41892	0.05613	-0.30985	0.30417	-0.14547	0.08482
VARIABLE 10 0.19205	0.37848	0.31511	0.02395	0.05921	-0.14625	-0.24240	0.10740	-0.64617	-0.09019
VARIABLE 11 0.10154	-0.04471	0.07153	-0.50923	-0.12888	-0.57241	-0.30004	-0.08112	-0.01350	-0.14486
VARIABLE 12 0.14500	0.11346	0.05825	0.37796	-0.13274	-0.34069	-0.29440	0.31949	-0.51101	0.00481
VARIABLE 13 0.15406	-0.32024	-0.13070	0.14215	-0.23759	0.20849	0.03737	0.63309	-0.07660	0.37526
VARIABLE 14 0.15013	0.26349	-0.23480	0.20193	0.00356	0.26316	-0.49426	0.32973	-0.15448	-0.44184
VARIABLE 15 0.42622	-0.00764	-0.19140	-0.02916	-0.03806	0.35376	-0.02766	0.16082	-0.57566	-0.28131
VARIABLE 16 0.37191	-0.50077	-0.43429	-0.19671	0.18819	0.12393	-0.09395	-0.65571	-0.37801	0.04302
VARIABLE 17 0.04799	-0.31280	0.00664	-0.49861	-0.06101	-0.50428	0.16580	-0.06301	-0.02382	-0.27958
VARIABLE 18 0.11157	-0.17685	0.33928	-0.27446	-0.05270	0.39385	0.42291	0.07697	-0.14732	-0.23510
VARIABLE 19 0.20125	-0.43166	-0.09861	0.03977	-0.35739	0.23294	-0.18915	-0.51059	-0.17526	0.00260
VARIABLE 20 0.43772	0.33652	0.12985	0.13275	-0.10973	0.37542	0.23124	-0.11452	-0.22626	-0.41951
VARIABLE 21 0.18422	0.08414	-0.14643	0.35030	-0.25744	0.66634	0.29096	0.00515	-0.12704	-0.08129
VARIABLE 22 0.44931	-0.24219	-0.34925	0.15404	-0.19208	0.03876	0.28394	-0.00876	-0.44263	-0.23873
VARIABLE 23 0.06957	-0.25438	0.01391	0.08212	-0.20565	-0.31144	0.49983	0.16317	-0.41740	-0.34937
VARIABLE 24 0.14216	0.32117	0.13435	0.03910	-0.18205	0.65965	-0.03768	0.09611	-0.31433	-0.24740
VARIABLE 25 0.03383	-0.14026	0.13363	-0.03383	-0.43642	-0.01472	-0.23708	0.21789	-0.42892	-0.32293
VARIABLE 26 0.20104	-0.28113	0.28927	-0.14324	0.05203	-0.05220	-0.44926	-0.04795	-0.45854	-0.30959
VARIABLE 27 0.25157	-0.43072	0.32009	-0.08875	0.07049	0.41948	0.12999	0.24642	-0.20114	-0.07847
VARIABLE 28 0.16411	-0.31941	0.17806	-0.05606	0.02975	-0.36412	-0.23248	0.26283	-0.49170	-0.32836
VARIABLE 29 0.07140	-0.02446	-0.10146	0.02701	-0.10318	-0.40951	-0.24196	0.48796	-0.39483	-0.28853
VARIABLE 30 0.19726	0.11096	0.00323	-0.41017	0.19372	-0.12356	-0.26513	-0.02186	-0.66053	0.03796

6.460*	3.761	2.549	2.159	1.715	1.494	1.331	1.267	1.013	0.951
21.58**	34.18	42.68	49.88	55.58	60.58	64.98	69.18	72.58	76.78

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-24

ROTATED FACTOR MATRIX FOR SU-11B (N.Z.)

VARIABLE 1 0.11742	0.09175	<u>-0.66341</u>	-0.23335	<u>-0.41395</u>	0.02537	0.06160	-0.03065	-0.19076
VARIABLE 2 0.18815	0.29414	<u>-0.72621</u>	-0.04222	0.15484	0.12317	0.11348	-0.01401	-0.01731
VARIABLE 3 0.88956	0.05106	-0.39027	-0.09366	-0.00051	0.20601	0.03508	-0.03214	0.00424
VARIABLE 4 0.08203	0.35023	<u>-0.45080</u>	-0.26665	0.01444	-0.14567	<u>-0.44137</u>	-0.24430	0.17920
VARIABLE 5 0.07083	-0.02890	<u>-0.73601</u>	0.01029	-0.18335	-0.16919	0.11409	-0.06204	-0.06399
VARIABLE 6 0.07912	-0.01337	-0.29589	-0.23005	0.04465	-0.18023	<u>0.66753</u>	-0.20090	-0.00441
VARIABLE 7 0.16642	0.21549	-0.19672	-0.01024	<u>-0.78084</u>	0.10102	0.01964	0.01407	-0.04089
VARIABLE 8 0.88718	<u>0.57789</u>	-0.19375	0.02088	-0.18068	0.08253	0.04211	-0.25278	-0.30683
VARIABLE 9 0.71374	-0.16163	-0.05483	-0.09943	-0.11028	-0.08899	-0.18974	-0.25329	-0.10629
VARIABLE 10 0.81100	0.15658	0.02818	-0.36162	<u>-0.51085</u>	0.00702	0.00384	-0.38361	-0.28671
VARIABLE 11 0.88931	0.00168	-0.11840	-0.01632	-0.14841	-0.01688	0.00929	-0.13472	<u>-0.83027</u>
VARIABLE 12 0.88342	0.14946	0.06039	<u>-0.51069</u>	<u>-0.67750</u>	-0.08858	-0.07007	-0.33305	-0.19725
VARIABLE 13 0.88888	0.18396	0.06865	-0.04702	-0.19316	0.02369	0.16461	-0.11126	-0.21196
VARIABLE 14 0.66709	0.22259	-0.04363	-0.16230	0.08194	<u>-0.71293</u>	0.13014	-0.14746	-0.05368
VARIABLE 15 0.10810	<u>0.55519</u>	-0.19865	-0.14408	-0.28375	-0.14876	0.29279	0.15009	-0.22098
VARIABLE 16 0.88072	0.16795	-0.26084	-0.33501	-0.36404	0.02027	0.24393	-0.14845	-0.11305
VARIABLE 17 0.83081	<u>0.51329</u>	-0.16732	-0.29781	0.04159	-0.06493	0.02291	<u>-0.56135</u>	-0.29115
VARIABLE 18 0.88378	0.31868	0.03415	-0.26356	-0.01596	-0.26810	-0.03192	<u>-0.55731</u>	-0.10474
VARIABLE 19 0.15696	0.13848	<u>-0.40360</u>	0.05255	-0.39525	0.31176	0.26010	-0.38642	-0.05329
VARIABLE 20 0.18432	0.14132	0.06293	<u>-0.48194</u>	-0.04677	<u>0.47573</u>	0.04106	-0.35073	-0.16792
VARIABLE 21 0.88134	<u>0.72307</u>	0.00952	0.07570	-0.12826	-0.27670	-0.00860	-0.04588	-0.01401
VARIABLE 22 0.81274	0.07914	-0.11378	-0.00194	-0.09020	0.04218	0.12626	<u>-0.74187</u>	0.05014
VARIABLE 23 0.87050	0.17772	-0.04760	-0.21045	-0.08949	-0.06985	0.14598	<u>-0.57739</u>	-0.10132
VARIABLE 24 0.88871	<u>0.75390</u>	-0.03460	-0.18055	-0.05912	0.03355	-0.06932	-0.26734	0.10073
VARIABLE 25 0.10989	-0.01140	-0.04546	<u>-0.72223</u>	-0.32891	-0.14912	0.00418	-0.14499	0.14673
VARIABLE 26 0.88052	0.30288	-0.16732	-0.15586	-0.26405	-0.01845	<u>0.53241</u>	-0.33157	0.08403
VARIABLE 27 0.32874	<u>0.60426</u>	-0.28774	-0.14080	-0.08427	0.08725	0.13268	-0.17133	0.25386
VARIABLE 28 0.19181	0.29044	-0.10351	<u>-0.67859</u>	0.23741	0.12581	0.19022	0.07468	-0.26467
VARIABLE 29 0.12155	0.00092	-0.13311	<u>-0.81091</u>	-0.03257	-0.08986	0.09887	-0.11978	0.03994
VARIABLE 30 0.24000	0.12379	-0.38727	-0.36600	-0.10263	-0.26289	0.11128	-0.10243	0.07173

8.446*	2.316	2.065	1.733	1.324	1.215	1.168	1.094	1.026
28.21**	35.9%	42.8%	48.5%	52.9%	57.0%	60.9%	64.5%	68.0%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-25

ROTATED FACTOR MATRIX FOR HIGH-M (KOR)

VARIABLE 1 0.20194	0.06825	-0.03259	0.00369	-0.25649	<u>-0.74375</u>	0.24382	0.12789	-0.14571
VARIABLE 2 0.14515	-0.24203	-0.26368	0.16947	0.10465	-0.34472	<u>0.39716</u>	0.31751	0.27278
VARIABLE 3 0.22888	-0.10173	<u>-0.46828</u>	-0.07587	0.24528	-0.20034	-0.22929	<u>0.41755</u>	0.27748
VARIABLE 4 0.17038	-0.13283	-0.25198	0.10026	-0.25894	-0.15340	<u>-0.40875</u>	<u>0.54217</u>	0.21432
VARIABLE 5 0.56484	0.27439	-0.15827	0.20016	-0.13092	<u>-0.57619</u>	-0.08721	0.20097	0.25488
VARIABLE 6 0.13779	0.05441	-0.35850	-0.05304	-0.15155	-0.39236	0.22213	<u>0.44461</u>	0.21706
VARIABLE 7 0.02805	0.17585	-0.33868	-0.00964	0.10130	-0.39001	-0.15755	<u>0.41032</u>	-0.15336
VARIABLE 8 0.29563	-0.00309	0.18382	-0.07685	0.03698	<u>-0.50534</u>	<u>-0.45215</u>	0.32436	0.06979
VARIABLE 9 0.07103	-0.17078	0.09886	0.06687	0.01423	-0.19582	-0.25857	<u>0.58113</u>	<u>0.51295</u>
VARIABLE 10 0.14577	0.04274	<u>0.45668</u>	0.36918	0.31119	-0.38472	-0.04185	0.20053	0.19094
VARIABLE 11 0.23890	0.05740	0.08063	<u>0.51913</u>	-0.03070	<u>-0.61507</u>	-0.02396	-0.05441	0.07992
VARIABLE 12 0.11834	-0.06835	0.36328	0.35107	-0.08489	-0.31749	-0.09629	<u>0.51303</u>	-0.26862
VARIABLE 13 0.03143	<u>0.51443</u>	0.24260	-0.13572	-0.16899	-0.38027	-0.01052	0.37680	0.05376
VARIABLE 14 0.15691	0.39819	0.36952	-0.15818	0.13926	-0.17220	-0.12775	<u>0.46329</u>	-0.17582
VARIABLE 15 0.19994	<u>0.56896</u>	0.18854	-0.02611	-0.02639	-0.18162	-0.14638	0.29946	0.29248
VARIABLE 16 0.32424	0.06711	-0.23388	-0.19150	0.01394	<u>-0.43601</u>	0.16771	<u>0.59055</u>	-0.02806
VARIABLE 17 0.22115	0.36411	-0.14671	-0.39289	0.29266	-0.19869	-0.14037	0.15338	0.31623
VARIABLE 18 0.17811	0.23925	-0.04440	-0.01057	-0.00461	0.04744	<u>0.47792</u>	<u>0.48970</u>	0.22778
VARIABLE 19 0.09603	-0.03625	0.29966	0.15942	0.33715	-0.38044	0.11723	0.17571	<u>0.48336</u>
VARIABLE 20 0.24045	<u>0.49907</u>	-0.28539	0.09522	0.18961	-0.23167	0.12483	0.31039	-0.27135
VARIABLE 21 0.26127	<u>0.53695</u>	-0.01353	0.26825	0.14129	-0.05074	0.17415	<u>0.45430</u>	0.00227
VARIABLE 22 0.40986	0.34071	-0.13803	0.11998	-0.06174	<u>-0.48921</u>	-0.02397	0.30249	-0.07138
VARIABLE 23 0.29981	-0.07442	-0.11880	0.11736	0.37862	<u>-0.49696</u>	0.05117	0.38852	-0.10737
VARIABLE 24 0.07065	<u>0.45009</u>	-0.21211	0.31271	0.19460	-0.26844	-0.28672	0.14648	0.39949
VARIABLE 25 0.17315	0.15677	<u>-0.45204</u>	0.13793	<u>0.40284</u>	<u>-0.43538</u>	-0.10462	0.21801	0.09348
VARIABLE 26 0.11558	0.05730	0.07612	0.13560	0.20331	<u>-0.55694</u>	<u>0.40944</u>	0.27258	0.12405
VARIABLE 27 0.26029	0.00705	-0.01876	<u>-0.43204</u>	0.25745	<u>-0.58865</u>	0.05616	0.05183	0.27277
VARIABLE 28 0.33915	0.10452	-0.12717	0.06553	<u>0.55652</u>	<u>-0.47226</u>	-0.01423	0.22473	-0.08500
VARIABLE 29 0.25232	0.20991	0.18963	0.10332	<u>0.52710</u>	-0.33322	-0.19257	<u>0.44488</u>	-0.05713
VARIABLE 30 0.00856	-0.02236	0.28766	0.10321	0.30007	-0.37802	0.11910	<u>0.44422</u>	0.30801
8.873*	2.037	1.888	1.648	1.518	1.390	1.295	1.087	1.049
29.6%**	36.4%	42.7%	48.2%	53.2%	57.8%	62.6%	65.8%	69.3%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-27

ROTATED FACTOR MATRIX FOR HIGH-F (KOR)

VARIABLE 1 0.16344	0.20446	0.07526	-0.39576	-0.16138	0.14543	<u>-0.63826</u>	-0.26960	0.18568
VARIABLE 2 0.30958	0.23104	0.22702	-0.35250	-0.20292	0.33473	-0.34024	-0.33439	-0.14073
VARIABLE 3 0.57566	0.13441	-0.11307	-0.26848	<u>-0.56711</u>	-0.00570	-0.17040	0.06204	0.09392
VARIABLE 4 0.45940	0.11403	<u>-0.59718</u>	0.00906	-0.22054	-0.14422	0.07889	0.06133	-0.08679
VARIABLE 5 0.00312	0.20865	<u>-0.02499</u>	<u>-0.66213</u>	-0.04760	0.30542	0.01317	0.07969	-0.17962
VARIABLE 6 0.17018	-0.04645	-0.19979	<u>-0.56581</u>	<u>-0.43458</u>	0.00559	0.26208	0.26280	0.07150
VARIABLE 7 0.44473	-0.30608	-0.03940	-0.16682	-0.15994	0.09609	-0.11567	<u>-0.51776</u>	-0.24747
VARIABLE 8 0.44876	-0.09247	-0.18341	-0.34066	-0.17845	-0.27410	0.08379	<u>-0.45279</u>	-0.00133
VARIABLE 9 0.29474	0.30931	<u>-0.48951</u>	-0.17904	<u>-0.41082</u>	-0.21978	-0.11401	0.02745	0.22888
VARIABLE 10 0.15845	0.05002	<u>-0.46715</u>	-0.23438	-0.38676	0.28543	-0.31869	0.03569	-0.13889
VARIABLE 11 0.08540	0.15401	<u>-0.40682</u>	-0.25053	-0.26659	0.03743	0.34952	<u>-0.44436</u>	<u>-0.40265</u>
VARIABLE 12 0.20637	-0.01713	-0.33656	-0.39031	-0.07780	0.16530	-0.37030	<u>-0.41259</u>	0.37068
VARIABLE 13 0.27358	<u>0.57756</u>	-0.17393	-0.35704	-0.31868	-0.07411	0.10054	-0.17200	0.10938
VARIABLE 14 0.11261	-0.16233	-0.31726	0.11831	-0.28494	0.16134	-0.16226	-0.30542	-0.16259
VARIABLE 15 0.04287	0.34998	<u>-0.48278</u>	-0.01485	0.07856	-0.15919	0.26251	<u>-0.52827</u>	-0.09610
VARIABLE 16 0.27908	0.26971	-0.22339	-0.35846	0.20348	0.31360	<u>-0.42864</u>	0.12977	0.15319
VARIABLE 17 0.06659	-0.11687	-0.32512	<u>-0.56184</u>	0.28627	-0.26962	-0.28673	0.09724	-0.08616
VARIABLE 18 0.08240	0.19119	-0.37406	-0.19030	-0.16360	-0.28337	-0.27511	0.03803	<u>-0.40698</u>
VARIABLE 19 0.00844	-0.04266	-0.11684	<u>-0.59547</u>	-0.19785	<u>-0.53074</u>	0.27825	-0.02233	0.10505
VARIABLE 20 0.00021	-0.32064	<u>-0.47067</u>	<u>-0.49889</u>	0.32951	<u>-0.05758</u>	-0.21260	0.06787	-0.06640
VARIABLE 21 0.11720	-0.23259	-0.31412	-0.22511	-0.14046	-0.09593	-0.14260	0.01177	<u>-0.66886</u>
VARIABLE 22 0.29473	-0.00194	<u>-0.52987</u>	-0.33994	-0.08627	-0.05362	-0.26874	0.10138	-0.35555
VARIABLE 23 0.24864	0.05472	-0.28906	<u>-0.59588</u>	0.26136	0.18927	-0.06075	0.10088	0.19939
VARIABLE 24 0.35239	-0.09713	<u>-0.72486</u>	-0.03497	0.11615	0.18634	-0.13286	0.00625	0.02438
VARIABLE 25 0.23340	0.03879	<u>-0.58673</u>	-0.05457	0.03544	<u>-0.40395</u>	-0.28910	0.02472	0.37342
VARIABLE 26 0.09407	0.10009	-0.20214	-0.34061	-0.22734	<u>-0.59443</u>	0.22120	-0.24179	-0.01273
VARIABLE 27 0.22878	-0.11011	<u>-0.40456</u>	-0.19487	-0.36522	-0.16761	0.03424	-0.35904	0.10791
VARIABLE 28 0.18422	<u>0.54950</u>	-0.12588	<u>-0.43282</u>	0.07981	-0.04668	-0.33302	0.15845	-0.11286
VARIABLE 29 0.01131	0.18036	-0.15176	-0.30553	0.39770	<u>-0.53814</u>	-0.37214	-0.05920	-0.00257
VARIABLE 30 0.50845	0.18472	0.11615	<u>-0.45050</u>	-0.02222	0.22872	-0.00567	-0.21761	-0.33449
7.166* 23.9%**	3.091 34.2%	2.334 42.0%	1.895 48.3%	1.830 54.4%	1.571 59.6%	1.263 63.8%	1.072 67.4%	1.008 70.8%
*Eigenvalues ** Cumulative percentage of Eigenvalues								

Appendix 15-31

ROTATED FACTOR MATRIX FOR LOW-F (KOR)

VARIABLE 1 -0.19968	0.15943	<u>-0.53663</u>	-0.00296	<u>-0.49174</u>	0.06761	0.08315	0.11840	-0.02802	0.34087
VARIABLE 2 0.26850	0.13786	-0.32874	-0.04644	-0.29268	-0.02564	0.27415	<u>-0.40039</u>	<u>0.51615</u>	-0.00096
VARIABLE 3 0.32894	0.00405	<u>-0.59861</u>	0.14328	-0.04525	-0.20151	0.16020	-0.26996	-0.22138	0.27506
VARIABLE 4 0.32628	0.19336	-0.13594	0.33047	<u>0.47803</u>	0.05789	-0.07569	-0.30861	-0.18127	-0.31863
VARIABLE 5 0.08346	<u>0.41523</u>	-0.33726	0.18376	-0.19474	-0.01099	0.09216	0.39070	0.09389	<u>0.44986</u>
VARIABLE 6 -0.10257	<u>0.65221</u>	-0.25270	0.33150	-0.02198	-0.03813	-0.13549	0.06935	0.12974	0.14412
VARIABLE 7 0.27620	0.35354	<u>0.41775</u>	-0.09596	-0.00311	-0.34542	-0.01314	-0.07429	0.23915	0.12582
VARIABLE 8 0.32858	0.36382	-0.25655	0.09922	<u>0.41149</u>	-0.39610	0.21604	-0.10811	-0.19852	0.60790
VARIABLE 9 0.09147	0.03068	-0.37634	-0.15141	-0.07330	<u>-0.68390</u>	-0.21614	0.16343	0.08425	-0.08801
VARIABLE 10 0.14179	0.27063	0.17263	0.29517	<u>-0.49894</u>	<u>-0.43100</u>	0.08732	0.23610	0.30562	0.06929
VARIABLE 11 -0.07232	<u>-0.42273</u>	-0.01753	<u>0.49690</u>	0.03717	-0.19271	0.01886	-0.38798	-0.18638	0.30765
VARIABLE 12 -0.44599	0.39669	-0.02915	0.28232	-0.18056	-0.27086	-0.27438	-0.19008	0.08084	-0.20960
VARIABLE 13 -0.07067	0.38272	-0.02649	-0.07543	-0.14367	-0.22480	-0.15396	-0.15380	-0.38211	-0.07561
VARIABLE 14 -0.35038	0.27026	-0.19985	0.07690	0.21429	-0.09360	<u>0.55628</u>	0.11573	0.06277	-0.24094
VARIABLE 15 -0.06689	0.01905	-0.31367	0.34172	0.33359	<u>-0.40268</u>	-0.02698	-0.00207	-0.13804	<u>0.48468</u>
VARIABLE 16 -0.03579	<u>0.44775</u>	-0.13158	-0.00671	-0.36343	0.04974	0.28323	<u>-0.44417</u>	-0.14287	0.27988
VARIABLE 17 -0.00008	0.35514	0.11195	0.36030	-0.10526	0.22150	-0.29969	-0.36118	-0.16415	0.35056
VARIABLE 18 -0.18375	0.27405	0.03322	<u>0.65781</u>	-0.09006	0.11706	0.09428	-0.08054	-0.02987	0.32571
VARIABLE 19 0.09119	0.21675	-0.25823	<u>0.54537</u>	0.19244	0.08695	<u>0.48491</u>	-0.09097	0.21391	-0.04904
VARIABLE 20 -0.02671	<u>0.43585</u>	-0.27257	0.30420	-0.11139	<u>0.53923</u>	-0.13344	0.18747	-0.29502	0.06737
VARIABLE 21 0.40322	0.12445	-0.13852	<u>0.41864</u>	0.14202	-0.21265	-0.04287	-0.24768	-0.33904	0.08064
VARIABLE 22 -0.17295	0.16408	0.23417	<u>0.43053</u>	-0.43715	-0.10390	0.14278	-0.03538	<u>-0.47010</u>	0.21614
VARIABLE 23 -0.01939	0.36422	-0.07183	<u>0.47075</u>	<u>-0.48027</u>	0.11828	0.02169	0.22168	-0.28161	-0.14978
VARIABLE 24 0.52066	0.04402	-0.30098	0.37217	-0.08574	-0.00081	<u>-0.45607</u>	-0.09026	-0.08899	0.00570
VARIABLE 25 0.11814	0.33980	-0.25410	-0.01141	-0.39321	-0.13337	0.27391	0.01655	<u>-0.50412</u>	0.23374
VARIABLE 26 0.00393	0.12748	-0.25996	<u>0.59239</u>	0.04525	-0.07649	<u>0.46874</u>	-0.07582	-0.26544	-0.23233
VARIABLE 27 0.06955	-0.20110	<u>-0.51007</u>	<u>0.54002</u>	0.03463	-0.10995	0.04797	-0.30145	0.10389	-0.02536
VARIABLE 28 -0.46953	0.13774	-0.33174	-0.01224	-0.36146	0.19477	0.06026	-0.28018	-0.02853	-0.35810
VARIABLE 29 -0.17596	<u>0.48447</u>	-0.15639	0.11730	<u>-0.49264</u>	0.25803	-0.05481	0.10061	-0.27664	-0.21149
VARIABLE 30 0.14603	-0.02249	-0.38574	0.24185	-0.12570	-0.14615	<u>-0.41265</u>	-0.09352	0.14730	-0.36834

5.914*	3.375	2.081	1.965	1.808	1.561	1.425	1.283	1.197	0.990
19.78**	31.08	37.98	44.48	50.58	55.78	60.48	64.78	68.78	72.08

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 15-32

ROTATED FACTOR MATRIX FOR LOW-F (N.Z.)

VARIABLE 1 0.33793	0.22138	0.03036	-0.04997	0.20859	-0.24031	0.01559	0.00629	-0.12244	-0.74333
VARIABLE 2 -0.68865	0.79013	0.23823	0.01194	-0.10927	0.23593	0.17141	0.09122	-0.07514	-0.23916
VARIABLE 3 0.10122	0.01491	0.25018	-0.14753	0.06190	0.20320	0.10817	-0.12094	0.01431	0.04345
VARIABLE 4 0.12047	0.20193	0.69213	-0.08418	-0.07646	0.19735	0.13545	0.09489	0.09072	-0.28927
VARIABLE 5 0.14093	0.14697	-0.03426	0.00511	0.11050	0.02630	-0.03792	0.23353	-0.71680	-0.23596
VARIABLE 6 0.09520	0.26763	-0.59827	0.26192	-0.05549	0.32618	0.24650	0.21840	-0.09023	-0.24907
VARIABLE 7 0.58183	-0.04220	0.18007	0.21400	0.42501	-0.01067	0.15107	0.04286	-0.24941	-0.42265
VARIABLE 8 0.23018	0.18354	0.26247	0.02519	0.28200	0.55838	0.11213	0.27302	0.18803	0.03902
VARIABLE 9 0.09550	0.02408	-0.14100	0.03069	0.02778	0.06191	-0.05827	0.23978	-0.21736	-0.04128
VARIABLE 10 0.34070	-0.35206	0.21580	-0.12282	-0.09657	0.27041	0.38072	0.03359	-0.34373	-0.03196
VARIABLE 11 0.01828	0.15249	-0.04629	0.05470	0.76462	0.21666	0.10467	0.24096	-0.21608	-0.11856
VARIABLE 12 0.00453	-0.07444	0.41398	-0.01940	-0.08451	0.23777	-0.18215	-0.10278	-0.38581	0.07621
VARIABLE 13 0.01400	0.29511	-0.03801	0.09468	0.00863	0.88238	-0.09540	-0.09784	-0.01487	0.03222
VARIABLE 14 0.00471	-0.15301	0.59233	-0.07852	0.61119	-0.11247	0.03192	0.00439	-0.14381	0.04293
VARIABLE 15 0.00368	0.21725	0.07852	-0.10883	0.12656	-0.08441	-0.09251	0.79819	-0.16317	-0.28868
VARIABLE 16 0.12900	0.29500	-0.02805	-0.00108	0.13063	-0.10526	0.33162	-0.02269	-0.66189	0.14647
VARIABLE 17 0.00213	0.24036	0.47255	0.27738	0.12391	0.03277	0.17821	0.22813	0.34776	-0.35505
VARIABLE 18 0.23586	0.16040	0.69008	0.20287	-0.19138	0.06424	0.21560	0.26472	0.00561	-0.03323
VARIABLE 19 -0.03963	-0.02401	0.03443	0.38049	-0.12216	0.10153	0.08007	0.04504	-0.01335	-0.81878
VARIABLE 20 0.77613	0.32998	0.10403	0.06535	0.17200	-0.03513	0.04127	0.01812	-0.09512	0.04047
VARIABLE 21 0.17583	-0.05022	0.20995	-0.06107	0.12433	0.08132	0.30058	0.76429	-0.08844	0.10024
VARIABLE 22 -0.00568	0.06522	0.00669	0.75739	-0.10423	-0.06141	0.09460	-0.24372	-0.21831	-0.82880
VARIABLE 23 0.07558	-0.13041	-0.09717	0.79872	0.07724	0.19381	-0.01782	0.06607	0.17784	-0.06943
VARIABLE 24 0.37947	0.34904	0.13637	0.29908	-0.03204	0.20760	0.04312	0.47330	0.26876	0.06365
VARIABLE 25 0.00048	0.12228	-0.02920	-0.15137	-0.03220	-0.07164	0.12628	0.13367	-0.10097	-0.21933
VARIABLE 26 0.37030	0.39114	0.09048	0.16230	-0.59458	0.16077	0.16775	0.01247	-0.16376	-0.21396
VARIABLE 27 0.12207	0.22880	0.12217	-0.20360	-0.04727	0.21012	0.79833	0.15633	-0.08981	-0.03815
VARIABLE 28 0.14883	0.01616	0.08311	0.30040	0.10064	-0.11798	0.79971	-0.00012	-0.02564	-0.11380
VARIABLE 29 0.75591	-0.03368	0.01066	0.12194	-0.19682	0.11416	0.15775	0.18717	0.02222	-0.03824
VARIABLE 30 0.35246	0.58184	-0.16156	-0.01862	-0.06708	0.10386	0.36818	0.13263	-0.43986	-0.07574

7.093*	2.891	2.456	2.421	2.123	1.615	1.520	1.261	.988	.953
23.60**	33.3%	41.5%	49.5%	56.6%	62.0%	67.1%	71.3%	74.6%	77.7%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-1

ROTATED FACTOR MATRIX FOR JU-M (KOR)

VARIABLE 1 =0.16625	0.25562	-0.10596	-0.21101	<u>0.65313</u>	-0.29214
VARIABLE 2 =0.51721	0.24549	0.09361	-0.28626	0.33357	-0.37023
VARIABLE 3 =0.29641	0.21901	0.06427	-0.23674	<u>0.61501</u>	-0.34502
VARIABLE 4 =0.26476	-0.20972	-0.14301	-0.17707	<u>0.60276</u>	-0.34360
VARIABLE 5 =0.18517	0.27489	0.07217	-0.03200	0.58802	-0.39852
VARIABLE 6 =0.11501	0.07057	0.09849	-0.33192	<u>0.59945</u>	-0.25479
VARIABLE 7 =0.17969	0.22430	-0.04643	0.14143	<u>0.63249</u>	-0.34393
VARIABLE 8 =0.22880	-0.08435	0.01354	-0.09202	0.51367	-0.42258
VARIABLE 9 =0.02393	0.19398	0.01536	-0.51216	0.36812	-0.49527
VARIABLE 10 =0.38443	-0.26424	-0.04767	0.16841	0.14466	-0.74152
VARIABLE 11 =0.02066	0.27823	0.31468	0.18064	0.53328	-0.48266
VARIABLE 12 =0.00967	-0.32148	-0.03979	-0.04305	0.45114	-0.59518
VARIABLE 13 =0.05057	0.17330	0.22761	-0.25352	<u>0.47701</u>	-0.32027
VARIABLE 14 =0.06798	0.22167	-0.43603	-0.36568	-0.29726	-0.56676
VARIABLE 15 =0.16689	0.38876	0.20380	-0.02367	0.50000	-0.33687
VARIABLE 16 =0.19262	0.23634	0.01591	-0.12254	<u>0.52521</u>	-0.44265
VARIABLE 17 =0.18059	0.23310	0.26477	-0.19723	<u>0.43037</u>	-0.47538
VARIABLE 18 =0.27361	0.14738	0.11090	-0.29764	0.36578	-0.48726
VARIABLE 19 =0.07634	<u>0.31276</u>	<u>0.51695</u>	-0.13782	0.32378	-0.36685
VARIABLE 20 =0.26239	-0.22487	0.34120	0.03541	0.20278	-0.62667
VARIABLE 21 =0.22311	-0.25402	0.37878	-0.19564	-0.17194	-0.48770
VARIABLE 22 =0.08592	0.19310	0.56244	-0.12600	0.33761	-0.39581
VARIABLE 23 =0.05180	-0.03017	0.49145	-0.28719	<u>0.41143</u>	-0.27078
VARIABLE 24 =0.37393	-0.20582	0.10994	-0.24803	<u>0.53861</u>	-0.35488
VARIABLE 25 =0.03995	-0.34301	0.09771	-0.42882	0.39802	-0.39374
VARIABLE 26 =0.24869	-0.06804	0.32759	0.01751	0.55629	-0.40767
VARIABLE 27 =0.02051	0.22705	0.26441	0.04413	<u>0.60937</u>	-0.38246
VARIABLE 28 =0.17417	-0.21759	0.12950	<u>-0.54340</u>	0.37256	-0.22930
VARIABLE 29 =0.20317	-0.36996	0.12594	-0.34883	0.50174	-0.39151
VARIABLE 30 =0.17394	-0.14208	0.15689	-0.02955	<u>0.58151</u>	-0.38650
12.387*	1.848	1.562	1.253	1.085	0.994
41.38**	47.4%	52.7%	56.8%	60.5%	63.8%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-2

ROTATED FACTOR MATRIX FOR JU-M (N.Z.)

VARIABLE 1 0.35159	0.51827	-0.19336	0.24769	0.18243	0.08540
VARIABLE 2 -0.00065	0.63467	0.30983	0.03324	0.02654	-0.24286
VARIABLE 3 0.46039	0.58541	-0.08938	0.07601	0.10195	-0.20632
VARIABLE 4 0.29404	0.56728	0.28635	-0.28663	0.11109	0.13759
VARIABLE 5 0.10133	0.58362	0.35811	0.31211	0.06991	0.15518
VARIABLE 6 0.28535	0.16604	-0.07294	0.69989	-0.15310	-0.01463
VARIABLE 7 0.42463	0.43793	-0.37772	0.05543	0.25507	0.37549
VARIABLE 8 0.76913	0.08631	0.16678	-0.01758	-0.00266	0.04882
VARIABLE 9 0.10679	0.62152	-0.27831	0.25548	0.21114	-0.16471
VARIABLE 10 0.37066	0.04795	0.13181	0.24295	0.40180	-0.09801
VARIABLE 11 0.76326	0.17561	0.12759	0.20929	0.14724	-0.07552
VARIABLE 12 0.66251	0.10925	-0.03237	0.17580	0.44076	0.01687
VARIABLE 13 0.31180	0.25695	-0.25770	0.37254	0.02679	-0.24361
VARIABLE 14 0.22377	-0.08816	0.75719	0.02367	-0.01783	-0.01749
VARIABLE 15 0.61974	0.21185	0.27644	0.13636	-0.00434	-0.19394
VARIABLE 16 0.28900	0.23153	0.01019	0.00614	0.35392	-0.65913
VARIABLE 17 0.81653	0.06698	0.07975	0.13836	0.16588	-0.02683
VARIABLE 18 0.75162	0.10110	0.09042	0.23842	0.20902	-0.09766
VARIABLE 19 0.22577	0.54922	-0.20573	0.07895	-0.12545	0.07645
VARIABLE 20 0.64489	0.15635	0.11107	0.28603	0.23257	0.17974
VARIABLE 21 0.24406	0.15965	0.71626	-0.11604	0.16352	-0.01972
VARIABLE 22 0.39167	0.02703	-0.19297	0.53494	0.20392	0.03853
VARIABLE 23 0.28149	0.28897	-0.04256	0.49296	0.36296	-0.04951
VARIABLE 24 0.47134	0.46562	0.23566	-0.08547	0.28857	-0.08674
VARIABLE 25 0.13584	0.35599	-0.02437	-0.00379	0.75307	-0.08592
VARIABLE 26 0.12825	0.46629	0.00936	0.49115	0.22591	-0.21837
VARIABLE 27 0.63632	0.36005	0.08059	0.09251	0.19680	-0.35596
VARIABLE 28 0.03526	-0.04075	0.27075	0.60278	0.48829	0.10975
VARIABLE 29 0.29969	0.05287	0.05328	0.11451	0.67753	-0.12740
VARIABLE 30 -0.05719	0.69391	0.09137	0.13931	0.40106	-0.21762

10.079*	2.461	2.195	1.581	1.243	0.977
33.68**	41.88	49.18	54.48	58.58	61.88

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-3

ROTATED FACTOR MATRIX FOR JU-F (KOR)

VARIABLE 1 -0.25177	<u>0.69563</u>	0.14453	-0.15600	0.34360
VARIABLE 2 -0.36639	0.39041	0.15934	<u>-0.41310</u>	0.24193
VARIABLE 3 -0.34033	<u>0.43544</u>	0.12847	<u>-0.50129</u>	0.21412
VARIABLE 4 -0.45675	0.10542	<u>0.56527</u>	-0.21966	0.30750
VARIABLE 5 -0.55992	<u>0.46349</u>	0.31365	-0.23232	0.18002
VARIABLE 6 -0.33038	0.29642	0.19504	<u>-0.69800</u>	0.21629
VARIABLE 7 -0.10049	-0.04007	<u>0.53428</u>	<u>-0.55126</u>	0.01345
VARIABLE 8 -0.14334	-0.03569	<u>0.55463</u>	<u>-0.47968</u>	0.35478
VARIABLE 9 -0.17628	0.04698	<u>0.43513</u>	<u>-0.54133</u>	0.27716
VARIABLE 10 -0.29215	-0.06319	-0.22616	<u>-0.41130</u>	<u>0.56440</u>
VARIABLE 11 -0.52309	0.02630	0.00554	<u>-0.42638</u>	<u>0.55977</u>
VARIABLE 12 -0.27066	0.14912	0.24725	-0.09541	<u>0.62160</u>
VARIABLE 13 -0.40185	0.21777	<u>0.45367</u>	-0.20279	0.25356
VARIABLE 14 -0.24737	0.03493	0.07665	<u>0.43062</u>	<u>0.66156</u>
VARIABLE 15 -0.66927	-0.01100	<u>0.41657</u>	-0.19189	0.39330
VARIABLE 16 -0.15079	<u>0.65937</u>	0.25497	-0.28232	0.29922
VARIABLE 17 -0.88238	0.13163	<u>0.54330</u>	-0.16867	0.31046
VARIABLE 18 -0.37200	0.16621	<u>0.46066</u>	-0.11396	<u>0.51525</u>
VARIABLE 19 -0.51024	0.01956	0.12969	<u>-0.64017</u>	0.04415
VARIABLE 20 -0.33272	-0.00278	<u>0.47203</u>	-0.14061	<u>0.58249</u>
VARIABLE 21 0.10024	-0.16534	0.34510	-0.36743	<u>0.67508</u>
VARIABLE 22 -0.42526	0.14050	0.14022	-0.26760	<u>0.64273</u>
VARIABLE 23 -0.37823	0.17821	0.26499	-0.19532	<u>0.57083</u>
VARIABLE 24 -0.04211	0.01699	<u>0.63413</u>	-0.24711	<u>0.55050</u>
VARIABLE 25 0.07325	<u>0.46250</u>	<u>0.56159</u>	-0.14299	<u>0.45363</u>
VARIABLE 26 -0.20105	<u>0.54421</u>	0.17519	<u>-0.48715</u>	0.36802
VARIABLE 27 -0.40484	0.22150	0.37950	-0.33126	<u>0.43376</u>
VARIABLE 28 -0.09866	<u>0.72087</u>	0.20657	-0.34173	0.34699
VARIABLE 29 0.06899	<u>0.60568</u>	0.39936	-0.06166	<u>0.48227</u>
VARIABLE 30 -0.20193	0.02904	0.02252	<u>-0.58015</u>	<u>0.45675</u>

14.374*	2.003	1.859	1.330	1.054
47.9% **	54.6%	60.8%	65.2%	68.7%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-4
ROTATED FACTOR MATRIX FOR JU-F (N.Z.)

VARIABLE 1 0.46177	-0.19199	<u>0.40821</u>	0.14761	0.08227	-0.16717	<u>0.43321</u>	-0.18189
VARIABLE 2 0.02107	0.12382	<u>0.80129</u>	0.14086	0.04837	-0.12870	0.20586	0.05264
VARIABLE 3 0.32748	0.13801	<u>0.65935</u>	0.03856	0.21782	-0.23705	0.16121	0.00146
VARIABLE 4 0.02509	<u>0.60805</u>	<u>0.42361</u>	-0.07760	0.15451	-0.34857	0.13651	0.06496
VARIABLE 5 0.17361	0.32124	0.16401	0.20326	0.03240	<u>-0.72566</u>	0.01490	0.03907
VARIABLE 6 0.08002	-0.06106	0.03939	0.09160	0.28347	<u>-0.61951</u>	0.23598	0.36379
VARIABLE 7 0.30877	0.19307	0.25622	0.24291	-0.03428	-0.34778	<u>0.49832</u>	-0.22701
VARIABLE 8 <u>0.83132</u>	0.15225	0.09151	0.07037	0.11071	-0.13562	0.12231	0.11300
VARIABLE 9 0.12076	0.13846	0.32371	0.08231	0.25665	-0.18356	<u>0.58446</u>	0.38964
VARIABLE 10 0.05273	<u>0.57778</u>	-0.29123	0.33163	0.04633	-0.24100	0.12691	0.10586
VARIABLE 11 <u>0.56539</u>	<u>0.54027</u>	-0.00052	0.15023	0.23362	-0.08133	-0.00865	-0.19538
VARIABLE 12 0.25896	0.36722	0.01893	<u>0.63771</u>	0.15030	-0.01998	0.25442	0.01963
VARIABLE 13 0.12540	0.20352	0.39269	0.13400	<u>0.57071</u>	0.15314	0.03370	0.28186
VARIABLE 14 <u>0.40649</u>	<u>0.45421</u>	-0.05830	0.04224	-0.35871	-0.23094	-0.32385	0.11933
VARIABLE 15 0.08244	<u>0.77364</u>	0.08368	0.06699	-0.04485	0.10935	0.22867	0.09311
VARIABLE 16 0.17745	<u>0.43666</u>	0.29211	0.05185	0.03862	-0.26091	-0.00446	<u>0.40416</u>
VARIABLE 17 <u>0.69226</u>	0.18916	0.08779	0.20695	0.28647	-0.08460	0.24025	0.05562
VARIABLE 18 0.77391	0.06796	0.16393	0.28054	0.16241	0.02253	-0.02963	0.22234
VARIABLE 19 0.13743	0.20577	0.21336	0.06543	0.25978	-0.03925	<u>0.73654</u>	0.11866
VARIABLE 20 0.35735	-0.05343	-0.25260	0.27333	<u>0.59161</u>	-0.23467	0.08197	0.14939
VARIABLE 21 0.16775	<u>0.53934</u>	0.30636	0.26508	0.21313	-0.28548	<u>-0.43198</u>	0.01940
VARIABLE 22 0.34379	0.05589	0.06446	0.17973	<u>0.65465</u>	-0.11962	0.28789	0.03727
VARIABLE 23 0.11880	0.18253	0.14298	0.11996	<u>0.77492</u>	-0.11389	0.07633	-0.01728
VARIABLE 24 0.16702	<u>0.79805</u>	0.16028	0.17435	0.16727	-0.02127	-0.01662	-0.04077
VARIABLE 25 0.05295	0.19108	0.30843	<u>0.71111</u>	0.10515	-0.16514	0.00499	0.26947
VARIABLE 26 0.21654	0.05845	0.16040	0.30053	0.08866	-0.15864	0.08561	<u>0.72856</u>
VARIABLE 27 <u>0.55791</u>	<u>0.50171</u>	0.07713	0.14630	0.26578	-0.12281	0.05781	0.23225
VARIABLE 28 0.20554	-0.24619	0.04449	<u>0.59842</u>	0.29854	-0.31436	-0.03296	-0.07110
VARIABLE 29 0.28190	0.20714	0.12927	<u>0.74740</u>	0.14480	0.01183	0.04557	0.22286
VARIABLE 30 0.07293	0.04820	<u>0.73851</u>	0.19815	-0.00576	0.13940	0.06522	<u>0.44034</u>
10.016*	2.696	2.291	1.657	1.426	1.258	1.096	1.058
33.4%**	42.4%	50.0%	55.5%	60.3%	64.5%	68.1%	71.7%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-5

ROTATED FACTOR MATRIX FOR SU-M (KOR)

VARIABLE 1 0.32025	0.23400	0.52832	-0.51005	0.02617	-0.25027
VARIABLE 2 0.15750	0.18223	0.55162	-0.56238	0.03819	-0.16371
VARIABLE 3 0.24929	0.45746	0.42013	-0.51352	0.01064	-0.30270
VARIABLE 4 0.35820	0.15319	0.36080	-0.09592	0.58018	-0.29142
VARIABLE 5 0.20332	0.22889	0.33416	-0.59222	0.06560	-0.32763
VARIABLE 6 0.20530	0.43055	0.10763	-0.43036	-0.00387	-0.34770
VARIABLE 7 0.32174	0.34357	0.03197	-0.35777	0.50492	-0.23900
VARIABLE 8 0.01279	-0.05049	-0.02849	-0.40095	0.47123	-0.52844
VARIABLE 9 0.16682	0.25823	0.24142	-0.30971	0.16035	-0.57655
VARIABLE 10 0.38027	0.10161	0.08759	-0.04932	0.16459	-0.59366
VARIABLE 11 0.06478	0.17920	-0.22114	-0.44976	0.23003	-0.62752
VARIABLE 12 0.33563	0.20556	0.22370	-0.23240	0.30616	-0.47279
VARIABLE 13 0.13123	0.18324	0.05393	-0.34718	0.16970	-0.63788
VARIABLE 14 0.27691	-0.59360	0.30991	-0.41298	0.17820	0.01167
VARIABLE 15 0.07501	-0.02119	-0.04150	-0.51859	0.34588	-0.48745
VARIABLE 16 0.23318	0.08190	0.38341	-0.46288	-0.04398	-0.44382
VARIABLE 17 0.19024	0.00080	0.12631	-0.32740	0.11024	-0.66126
VARIABLE 18 0.05907	-0.25621	0.13849	-0.31229	0.10962	-0.62394
VARIABLE 19 0.36998	-0.17544	0.22811	-0.53183	0.04309	-0.37330
VARIABLE 20 0.02862	-0.09594	0.18236	-0.02911	0.44646	-0.67816
VARIABLE 21 0.21754	-0.35265	0.31871	0.04376	0.56572	-0.31294
VARIABLE 22 0.25842	0.07568	0.25554	-0.15519	0.07409	-0.67588
VARIABLE 23 0.19295	0.26773	0.30448	0.01855	0.10589	-0.66646
VARIABLE 24 0.04965	-0.03090	0.11479	-0.05542	0.55079	-0.64734
VARIABLE 25 0.00417	0.03485	0.51003	-0.02945	0.09808	-0.63781
VARIABLE 26 0.03044	0.03697	0.12066	-0.47776	-0.17320	-0.63459
VARIABLE 27 0.04753	-0.00025	-0.08333	-0.51521	0.14221	-0.65229
VARIABLE 28 0.12119	-0.11325	0.51680	-0.02426	-0.22645	-0.49550
VARIABLE 29 0.14086	0.10081	0.54850	0.02114	0.00109	-0.63064
VARIABLE 30 0.33711	0.10677	0.29776	-0.27787	0.14111	-0.56608
12.719*	1.978	1.623	1.280	1.261	1.018
42.48**	49.04	54.48	58.74	62.98	66.34

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-6

ROTATED FACTOR MATRIX FOR SU-M (N.Z.)

VARIABLE 1 0.10767	-0.13531	-0.05574	0.20708	<u>-0.59028</u>	-0.25592	-0.08414
VARIABLE 2 -0.17023	<u>-0.49942</u>	-0.25369	0.00471	<u>-0.54030</u>	-0.09064	0.03986
VARIABLE 3 0.31164	-0.35749	-0.06672	-0.06989	<u>-0.45008</u>	<u>-0.40082</u>	0.09501
VARIABLE 4 -0.09578	-0.31814	<u>-0.53697</u>	0.07979	-0.33922	-0.37723	-0.05856
VARIABLE 5 0.16066	-0.12438	-0.26165	0.09453	<u>-0.55324</u>	0.09914	0.39114
VARIABLE 6 0.22448	0.05833	0.21317	0.29887	<u>-0.55787</u>	-0.27277	0.29439
VARIABLE 7 0.31403	-0.10894	-0.03692	0.07824	-0.10115	<u>-0.77515</u>	0.00515
VARIABLE 8 0.19978	0.21769	<u>-0.49621</u>	0.17482	-0.05027	<u>-0.50246</u>	0.18685
VARIABLE 9 0.33065	<u>-0.66087</u>	0.03060	0.14710	-0.22355	-0.16431	0.19379
VARIABLE 10 0.14683	-0.09294	-0.32364	0.22703	0.07054	0.00593	<u>0.70056</u>
VARIABLE 11 0.00020	0.01587	-0.37422	0.11535	-0.17346	-0.02041	0.37636
VARIABLE 12 0.31008	-0.18161	-0.19342	<u>0.45316</u>	-0.09442	-0.22335	0.12149
VARIABLE 13 0.60902	<u>-0.45367</u>	-0.06614	0.08931	-0.05619	-0.15646	0.05770
VARIABLE 14 0.12104	0.21062	<u>-0.64740</u>	0.14234	-0.11653	0.13660	0.23809
VARIABLE 15 0.31044	-0.27981	<u>-0.42247</u>	0.01382	-0.35019	0.03118	-0.07799
VARIABLE 16 0.21938	-0.19966	-0.09554	0.30699	<u>-0.63440</u>	0.05964	0.01622
VARIABLE 17 0.00004	0.14210	-0.24655	0.32881	-0.28053	-0.06119	0.07881
VARIABLE 18 0.33475	0.08584	-0.36706	0.37827	-0.19796	-0.09632	0.16172
VARIABLE 19 -0.25748	-0.25789	0.15317	0.21608	-0.05725	<u>-0.44372</u>	<u>0.41530</u>
VARIABLE 20 0.33017	-0.01934	-0.12082	<u>0.52049</u>	-0.08388	0.03390	0.20050
VARIABLE 21 0.11429	-0.21786	<u>-0.78096</u>	0.05562	0.03288	0.02193	0.03545
VARIABLE 22 0.23394	-0.09074	0.23576	0.21646	0.01214	-0.37016	0.21811
VARIABLE 23 0.37059	-0.20365	-0.11028	-0.00929	-0.21946	-0.26442	<u>0.42794</u>
VARIABLE 24 0.36710	-0.28763	<u>-0.68239</u>	0.21660	-0.10219	-0.13630	0.02024
VARIABLE 25 0.08440	-0.35345	-0.06414	<u>0.70836</u>	-0.14042	-0.13973	0.18513
VARIABLE 26 0.37594	-0.32914	0.06410	0.17247	-0.29209	-0.23191	<u>0.53954</u>
VARIABLE 27 0.34866	-0.22512	-0.38942	0.08853	-0.24633	-0.32050	0.12701
VARIABLE 28 0.00229	0.03859	-0.10225	<u>0.75710</u>	-0.10796	-0.01278	0.02752
VARIABLE 29 0.15899	-0.08374	-0.10594	<u>0.77908</u>	-0.19230	-0.15624	0.07222
VARIABLE 30 0.07184	<u>-0.60700</u>	-0.17819	0.08974	-0.13762	-0.01078	0.10870
9.870*	2.372	2.176	1.507	1.178	1.133	1.005
32.98**	40.8%	48.1%	53.1%	57.0%	60.8%	64.1%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-7

ROTATED FACTOR MATRIX FOR SU-F (KOR)

VARIABLE 1					
"0.23600	0.37255	"0.21944	0.48087	0.42179	"0.37344
VARIABLE 2					
"0.30513	0.24140	"0.13682	0.22147	0.53726	"0.43179
VARIABLE 3					
"0.17106	0.64990	0.02157	0.24188	0.39559	"0.14354
VARIABLE 4					
0.08273	0.75996	"0.10674	"0.10772	"0.05751	"0.06633
VARIABLE 5					
"0.21813	0.38131	0.05873	"0.10390	0.12116	"0.57827
VARIABLE 6					
"0.04515	0.66714	0.25256	0.11873	0.29473	"0.12358
VARIABLE 7					
"0.20147	0.70215	0.07319	"0.01454	"0.11665	0.18235
VARIABLE 8					
"0.13306	0.73810	"0.24129	"0.02265	"0.32260	"0.01456
VARIABLE 9					
"0.15316	0.70821	0.18434	0.40582	"0.20042	0.13202
VARIABLE 10					
0.37031	0.36854	0.32725	0.36881	"0.25505	"0.37625
VARIABLE 11					
0.16146	0.63940	"0.07869	"0.09852	"0.31045	"0.42894
VARIABLE 12					
0.09079	0.47010	"0.16131	"0.06675	0.24506	"0.56853
VARIABLE 13					
"0.10094	0.63533	0.31483	"0.02386	"0.01425	"0.14478
VARIABLE 14					
"0.37581	0.11097	"0.41958	0.07763	0.25199	"0.12886
VARIABLE 15					
"0.21477	0.42406	"0.10125	0.03850	"0.09749	"0.76946
VARIABLE 16					
"0.08119	0.34756	0.23922	0.40166	0.20195	"0.35321
VARIABLE 17					
"0.29658	0.70478	0.16939	0.02537	0.10098	"0.07589
VARIABLE 18					
0.02409	0.69957	"0.04415	"0.04410	0.26665	"0.38640
VARIABLE 19					
"0.14334	0.64183	"0.01746	0.05754	0.04899	"0.49511
VARIABLE 20					
0.33535	0.73197	0.03443	"0.31410	0.30195	"0.13710
VARIABLE 21					
0.31256	0.63658	"0.22670	0.12166	"0.09857	"0.23704
VARIABLE 22					
"0.04654	0.73867	"0.05344	0.14262	0.16304	"0.24280
VARIABLE 23					
"0.09481	0.65900	0.08747	0.08063	0.01263	"0.54363
VARIABLE 24					
"0.26683	0.56742	0.20958	"0.50363	0.01354	"0.29687
VARIABLE 25					
"0.20712	0.31611	0.35541	0.20506	"0.04322	"0.37491
VARIABLE 26					
"0.39773	0.46343	0.25747	0.28451	"0.09255	"0.43710
VARIABLE 27					
"0.34088	0.53816	0.20572	"0.42650	"0.00434	"0.35861
VARIABLE 28					
"0.13021	0.46122	0.51799	0.21584	0.24550	"0.28302
VARIABLE 29					
"0.10167	0.45242	0.47410	0.04531	0.42711	"0.26454
VARIABLE 30					
"0.50417	0.45135	0.32544	0.16179	0.06378	"0.22246
12.816*	2.229	1.662	1.394	1.257	1.136
42.7%**	50.2%	55.7%	60.3%	64.5%	68.3%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-9

ROTATED FACTOR MATRIX FOR JU-XN (KOR)

VARIABLE 1 0.02621	0.26250	0.46506	0.34656	0.42577	-0.31262	-0.16047
VARIABLE 2 0.07406	0.71224	0.27847	0.15803	0.42041	-0.02869	-0.06945
VARIABLE 3 0.13055	0.40282	0.25833	0.27266	0.46972	-0.34272	-0.33003
VARIABLE 4 0.04490	0.51378	0.55075	0.19118	-0.13272	-0.10476	-0.28894
VARIABLE 5 0.40669	0.30143	0.19740	0.35810	0.27394	-0.15104	-0.46423
VARIABLE 6 0.11227	0.47550	0.19762	0.19209	0.29522	-0.35073	-0.50129
VARIABLE 7 0.02583	0.23956	0.40656	-0.49592	0.22709	-0.05245	-0.57991
VARIABLE 8 0.10845	0.27581	0.29712	0.17670	0.04685	-0.07218	-0.60174
VARIABLE 9 0.08024	0.58557	0.53553	-0.04696	0.21844	0.23862	-0.38800
VARIABLE 10 0.36317	0.25465	0.56715	-0.29987	0.24285	-0.41951	0.11780
VARIABLE 11 0.98220	0.10705	0.33642	0.11959	0.05759	-0.47127	-0.40069
VARIABLE 12 0.28168	0.42034	0.56951	0.34132	0.11002	-0.27576	0.22992
VARIABLE 13 0.36882	0.27869	0.54215	0.13489	-0.04897	-0.08025	-0.36930
VARIABLE 14 0.98071	-0.02221	0.64572	0.09504	-0.02036	0.16343	-0.01710
VARIABLE 15 0.47219	0.30533	0.28482	0.02334	-0.06764	-0.18443	-0.58752
VARIABLE 16 0.80940	0.10636	0.48806	0.12331	0.48915	-0.32369	-0.37432
VARIABLE 17 0.17294	0.29023	0.50771	0.14646	-0.26857	-0.23467	-0.53070
VARIABLE 18 0.12012	0.45524	0.49575	0.38739	-0.23421	0.01248	-0.37178
VARIABLE 19 0.96870	0.41165	0.01755	-0.13388	0.24100	0.04150	-0.46759
VARIABLE 20 0.08831	0.24398	0.68210	0.03801	-0.27952	-0.17025	-0.37996
VARIABLE 21 0.14385	0.32748	0.66764	0.28476	-0.13158	-0.06635	0.04960
VARIABLE 22 0.43355	0.27963	0.33127	0.57425	0.11456	-0.16267	-0.29363
VARIABLE 23 0.10187	0.32068	0.35601	0.35570	-0.21356	-0.30470	-0.45319
VARIABLE 24 0.15038	-0.04142	0.78487	0.27410	-0.09772	-0.01237	-0.37009
VARIABLE 25 0.26476	0.24030	0.62055	0.33630	0.24208	0.34720	-0.24522
VARIABLE 26 0.09078	0.09731	0.40279	0.19294	0.38280	-0.29112	-0.56749
VARIABLE 27 0.09035	0.14862	0.66847	0.04388	0.28547	-0.34960	-0.46059
VARIABLE 28 0.00891	-0.04466	0.47921	0.45422	0.55277	-0.13797	-0.27603
VARIABLE 29 0.10629	-0.03372	0.66519	0.33070	0.42545	-0.04893	-0.29887
VARIABLE 30 0.13443	0.61246	0.26015	-0.05749	0.16276	-0.43749	-0.30421

14.273*	2.246	2.009	1.512	1.234	1.180	1.050
47.6%**	55.10	61.8%	66.8%	70.9%	74.9%	78.4%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-10

ROTATED FACTOR MATRIX FOR JU-XN (N.Z.)

VARIABLE 1 0.49919	-0.48537	-0.26848	-0.17386	0.23798	-0.06165	0.02122
VARIABLE 2 0.10896	-0.77874	-0.06384	0.18439	-0.03147	0.09388	0.01533
VARIABLE 3 0.44691	-0.37630	-0.12533	0.01904	-0.08423	0.15203	0.19146
VARIABLE 4 0.14151	-0.43648	0.09810	0.33901	-0.04242	0.05112	0.38077
VARIABLE 5 0.37078	-0.44627	-0.29480	0.47417	0.12462	-0.16553	0.27552
VARIABLE 6 0.16720	-0.68629	-0.70351	0.10356	0.03951	0.03721	0.04621
VARIABLE 7 0.33020	-0.32010	-0.15025	-0.18008	0.18454	-0.02944	0.68101
VARIABLE 8 0.71118	-0.03276	0.00269	0.26794	-0.09487	0.17701	0.26867
VARIABLE 9 0.69233	-0.61841	-0.08637	-0.09695	0.30400	0.14315	0.20752
VARIABLE 10 0.30748	-0.16673	-0.10704	0.30343	0.30306	0.07458	0.12690
VARIABLE 11 0.97884	-0.63703	-0.16602	0.27989	0.21388	0.13999	0.24939
VARIABLE 12 0.34703	-0.10961	-0.21486	0.03623	0.19745	0.20650	0.28166
VARIABLE 13 0.24131	-0.18657	-0.41559	-0.01085	0.14947	0.38470	0.37069
VARIABLE 14 0.21738	0.69425	-0.03149	0.72300	0.01211	0.02195	-0.11032
VARIABLE 15 0.38495	-0.05178	-0.19853	0.35854	-0.02110	0.49751	0.29735
VARIABLE 16 0.30376	-0.30390	-0.03810	0.01354	0.19408	0.60511	-0.15314
VARIABLE 17 0.66451	-0.13197	-0.05447	0.11642	0.16800	0.16925	0.83519
VARIABLE 18 0.61303	-0.19409	-0.11191	0.14364	0.24791	0.06532	-0.02165
VARIABLE 19 0.22113	-0.58401	-0.07220	-0.20004	0.02283	-0.05432	0.25192
VARIABLE 20 0.38727	0.02329	-0.32770	0.26366	0.30584	-0.10278	0.19841
VARIABLE 21 0.22055	-0.10107	-0.01707	0.70423	0.14449	0.10444	0.07776
VARIABLE 22 0.35761	-0.06661	-0.36584	-0.04945	0.34612	0.08747	0.36617
VARIABLE 23 0.17094	-0.24382	-0.40094	-0.01826	0.31661	0.14499	0.26613
VARIABLE 24 0.38972	-0.40663	-0.00800	0.27592	0.19012	0.38352	0.45519
VARIABLE 25 0.13227	-0.40310	0.12227	0.03718	0.59712	0.25472	0.25494
VARIABLE 26 0.10784	-0.48290	-0.59463	0.04646	0.16942	0.17958	-0.08492
VARIABLE 27 0.66020	-0.33660	-0.13516	0.19474	0.03540	0.31221	0.11392
VARIABLE 28 0.06911	0.12484	-0.31561	0.26908	0.66944	-0.06802	-0.04187
VARIABLE 29 0.41909	-0.17798	0.00349	0.05660	0.67110	0.12868	-0.03030
VARIABLE 30 0.12593	-0.74593	-0.05716	0.12651	0.22878	0.22276	0.04646
10.421*	2.670	1.785	1.485	1.144	1.074	0.951
34.78**	43.68	49.68	54.58	58.38	61.98	65.18

* Eigen values ** Cumulative percentage of Eigenvalues

Appendix 16-11

ROTATED FACTOR MATRIX FOR JU-NB (KOR)

VARIABLE 1 =0.03169	0.15660	0.05807	-0.18340	-0.69360	-0.32290
VARIABLE 2 =0.40834	0.12522	0.16720	-0.29821	-0.47536	-0.34259
VARIABLE 3 =0.27015	0.22949	0.11652	-0.23407	-0.64959	-0.16966
VARIABLE 4 =0.13166	0.13595	-0.32425	0.08769	-0.69402	0.14306
VARIABLE 5 =0.23938	-0.19662	0.11589	-0.08241	-0.62901	-0.37560
VARIABLE 6 =0.24774	0.11775	0.03438	-0.11992	-0.66732	-0.02376
VARIABLE 7 =0.09591	0.38131	-0.17138	0.20096	-0.54477	-0.21113
VARIABLE 8 =0.14669	0.05105	-0.23766	0.38860	-0.62423	0.04655
VARIABLE 9 =0.32328	-0.12018	0.18023	-0.02069	-0.71962	0.11313
VARIABLE 10 =0.21847	-0.03440	-0.49308	-0.20898	-0.17666	-0.32627
VARIABLE 11 =0.02987	0.29284	-0.07469	0.26428	-0.50834	-0.30130
VARIABLE 12 =0.11298	0.13505	-0.62504	-0.03816	-0.57629	-0.02801
VARIABLE 13 =0.21472	-0.06651	0.15800	-0.15027	-0.63619	-0.08416
VARIABLE 14 =0.18697	-0.62002	-0.12589	0.11529	-0.27225	-0.11820
VARIABLE 15 =0.26275	0.09993	0.06104	0.37138	-0.62530	-0.22993
VARIABLE 16 =0.27689	0.13741	0.04769	-0.13021	-0.62206	-0.24677
VARIABLE 17 =0.37341	-0.04434	0.05958	0.25556	-0.64217	0.04633
VARIABLE 18 =0.24131	-0.01874	-0.07830	0.25786	-0.70859	0.04230
VARIABLE 19 =0.04388	0.47536	0.14399	0.13159	-0.41584	0.08524
VARIABLE 20 =0.04596	0.04318	-0.43665	0.21322	-0.38792	0.17643
VARIABLE 21 =0.05140	-0.06970	-0.23613	0.10422	-0.05661	0.44653
VARIABLE 22 =0.03694	0.38261	-0.05597	0.25701	-0.43074	0.08868
VARIABLE 23 =0.02293	0.25691	0.00546	-0.05768	-0.54183	0.15687
VARIABLE 24 =0.10568	0.09617	-0.26186	0.22687	-0.63854	0.28111
VARIABLE 25 =0.22381	0.00153	-0.24531	-0.34081	-0.61969	0.20435
VARIABLE 26 =0.46964	0.30779	-0.14017	-0.13722	-0.51100	-0.23126
VARIABLE 27 =0.34061	0.25570	-0.00158	0.26181	-0.60648	-0.17177
VARIABLE 28 =0.22300	0.04031	0.03267	-0.38209	-0.59307	0.28147
VARIABLE 29 =0.22397	0.09176	-0.34412	-0.38067	-0.64158	0.07196
VARIABLE 30 =0.42537	0.19103	-0.17095	-0.08533	-0.49263	-0.14593
12.587*	1.864	1.566	1.224	1.098	1.021
42.08**	48.28	53.48	57.58	61.18	64.58

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-12

ROTATED FACTOR MATRIX FOR JU-NB (N.Z.)

VARIABLE 1 0.23572	0.05781	<u>-0.69986</u>	0.27692	-0.09101	0.06141	-0.13510
VARIABLE 2 -0.06145	0.03813	-0.18669	<u>0.68587</u>	0.12497	0.17259	-0.16171
VARIABLE 3 0.26242	0.32876	-0.39804	<u>0.51738</u>	-0.08657	0.02202	-0.27984
VARIABLE 4 0.11190	<u>0.39064</u>	-0.18974	0.34706	0.24081	0.19221	0.09914
VARIABLE 5 -0.02662	0.14115	<u>-0.55506</u>	0.25483	0.37071	-0.27161	-0.21757
VARIABLE 6 0.30767	-0.06532	-0.35455	0.13832	-0.13057	-0.03640	<u>-0.54926</u>
VARIABLE 7 0.27028	0.17427	<u>-0.75921</u>	-0.00134	-0.10403	-0.19504	-0.07700
VARIABLE 8 0.73696	0.16157	-0.17583	0.00747	0.20879	0.04511	-0.20731
VARIABLE 9 0.08967	0.13246	-0.31726	<u>0.43620</u>	-0.20442	-0.05537	<u>-0.57428</u>
VARIABLE 10 0.04291	0.28191	-0.04673	-0.11291	-0.06324	<u>-0.75146</u>	-0.16174
VARIABLE 11 0.40542	<u>0.63702</u>	-0.25716	-0.02013	-0.08741	-0.25037	-0.22490
VARIABLE 12 0.57740	0.32224	-0.24760	0.04258	0.08637	<u>-0.57066</u>	0.01550
VARIABLE 13 0.47808	0.31171	-0.11642	0.32527	<u>-0.49136</u>	0.00862	-0.16897
VARIABLE 14 0.21360	0.09520	0.03013	-0.06298	<u>0.71640</u>	-0.00527	0.00471
VARIABLE 15 0.08892	<u>0.74691</u>	-0.14392	0.02954	0.03949	-0.03498	-0.06610
VARIABLE 16 -0.14291	<u>0.48323</u>	-0.01641	<u>0.46290</u>	-0.10109	-0.26302	-0.18148
VARIABLE 17 0.72283	0.14540	-0.34774	0.03098	0.14057	-0.13768	-0.22161
VARIABLE 18 0.78081	0.13359	-0.15303	0.24128	-0.03876	-0.13429	-0.07407
VARIABLE 19 0.19643	0.17792	-0.35582	-0.03675	0.12919	0.16122	<u>-0.57446</u>
VARIABLE 20 0.64175	0.08373	-0.14184	0.13810	0.10481	-0.16363	-0.31631
VARIABLE 21 -0.07641	<u>0.46554</u>	0.06757	0.27070	<u>0.60867</u>	-0.09976	-0.02563
VARIABLE 22 0.37868	-0.01538	0.09670	0.01352	-0.19248	-0.25432	<u>-0.50367</u>
VARIABLE 23 0.38804	0.22769	0.07101	0.13831	0.08687	-0.19598	<u>-0.67969</u>
VARIABLE 24 0.24014	<u>0.72125</u>	0.04615	0.08620	0.25305	-0.16071	-0.06635
VARIABLE 25 0.21839	0.03584	-0.10486	<u>0.58243</u>	0.15871	<u>0.39198</u>	0.06341
VARIABLE 26 0.34554	0.14566	0.05695	<u>0.61284</u>	-0.04799	-0.24578	-0.15765
VARIABLE 27 0.41862	<u>0.51743</u>	-0.10157	0.32487	-0.04996	-0.30206	-0.18303
VARIABLE 28 0.18644	-0.21677	-0.12421	0.29114	0.18412	<u>-0.47211</u>	<u>-0.45936</u>
VARIABLE 29 0.40328	-0.03364	-0.00193	<u>0.43842</u>	0.10222	<u>-0.51827</u>	0.08456
VARIABLE 30 0.13891	0.16631	-0.11238	<u>0.63559</u>	-0.03512	-0.08016	-0.04341
9.542*	2.508	2.188	1.913	1.425	1.222	1.484
31.88**	40.2%	47.5%	53.8%	58.6%	62.7%	66.5%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-13

ROTATED FACTOR MATRIX FOR SU-XN (KOR)

ROTATED FACTOR MATRIX (9 FACTORS)

VARIABLE 1 0.23321	-0.02753	-0.66172	-0.46671	-0.19940	0.15621	0.11514	-0.04675	0.22444
VARIABLE 2 0.25722	0.11362	-0.66913	-0.49748	-0.16995	0.19640	0.10804	-0.05882	0.12176
VARIABLE 3 0.06215	0.15068	-0.50129	0.13154	-0.29268	<u>0.51579</u>	0.28517	0.09273	0.11577
VARIABLE 4 0.53817	-0.30572	-0.26021	-0.17982	0.06772	<u>0.43150</u>	0.29392	-0.02393	0.14191
VARIABLE 5 0.05268	-0.28425	-0.42468	-0.11102	-0.23620	-0.46802	0.08136	-0.42516	-0.13614
VARIABLE 6 0.03912	0.07666	-0.40110	0.15416	-0.03210	<u>0.50047</u>	<u>0.44960</u>	-0.04580	-0.31756
VARIABLE 7 0.32718	-0.21506	-0.47579	-0.49479	-0.07399	0.24407	0.17994	-0.11681	-0.26711
VARIABLE 8 0.42989	0.12703	-0.54136	-0.36418	0.27039	0.22278	-0.06036	0.17751	-0.08234
VARIABLE 9 0.04644	-0.31002	-0.41771	-0.40464	0.36886	-0.01545	0.38695	0.24432	-0.04459
VARIABLE 10 0.10386	-0.06076	0.09112	0.02909	0.54021	0.21328	<u>0.49823</u>	-0.35223	-0.23538
VARIABLE 11 0.07247	0.13970	-0.30690	-0.37134	<u>0.43329</u>	<u>0.47085</u>	0.11072	-0.22507	0.07147
VARIABLE 12 0.12015	-0.26244	-0.28248	0.05448	0.17115	0.25357	0.39806	-0.31550	<u>0.45399</u>
VARIABLE 13 0.01245	<u>0.43560</u>	-0.11707	-0.03954	0.11847	0.29570	<u>0.51462</u>	-0.27053	-0.23059
VARIABLE 14 0.10243	0.24962	-0.37703	-0.00577	0.07385	-0.14307	-0.00979	-0.75250	0.08619
VARIABLE 15 0.34446	0.16551	-0.16766	-0.11689	0.01373	<u>0.49172</u>	0.24265	-0.23860	<u>0.53401</u>
VARIABLE 16 0.19695	0.02811	-0.30898	0.04267	-0.06965	0.01251	<u>0.70515</u>	0.00786	0.35679
VARIABLE 17 0.20815	<u>0.51567</u>	-0.30462	0.01729	0.16191	0.24063	0.16167	-0.46519	0.12975
VARIABLE 18 0.36189	<u>0.46338</u>	-0.32770	0.18239	0.28122	0.22606	0.20691	0.12656	0.01806
VARIABLE 19 0.35921	0.11482	-0.33540	-0.04868	-0.14887	<u>0.57838</u>	0.12132	-0.23233	0.03632
VARIABLE 20 0.64215	0.01859	-0.20324	0.16607	<u>0.43742</u>	0.28300	0.22262	0.11713	-0.06807
VARIABLE 21 0.40249	-0.10551	-0.19648	0.22773	<u>0.67645</u>	0.14283	-0.12246	-0.09853	0.09270
VARIABLE 22 0.23833	<u>0.40742</u>	-0.27373	0.23111	0.28795	<u>0.49765</u>	0.27939	0.01633	0.00605
VARIABLE 23 0.13865	0.32055	-0.15974	0.19144	0.13487	<u>0.70983</u>	0.31269	-0.00538	-0.01268
VARIABLE 24 0.58918	0.36602	-0.26836	-0.08827	0.16802	0.29032	0.22691	0.12479	-0.04311
VARIABLE 25 0.43639	0.17845	-0.29372	0.29408	-0.11077	-0.00041	<u>0.65623</u>	-0.02682	-0.12875
VARIABLE 26 0.08908	0.35354	-0.29344	-0.14507	-0.03827	0.00884	<u>0.51561</u>	-0.40252	0.05411
VARIABLE 27 0.28940	-0.44694	-0.24875	-0.31743	0.09601	0.12215	0.31162	-0.30658	-0.06200
VARIABLE 28 0.06291	0.13415	-0.50906	0.06201	-0.29614	0.09935	0.38146	-0.29169	-0.22252
VARIABLE 29 0.25198	-0.03730	-0.36639	0.26980	-0.22049	-0.04456	<u>0.63324</u>	-0.16328	-0.21725
VARIABLE 30 0.40928	<u>0.40124</u>	-0.20428	-0.16814	-0.25313	0.07893	<u>0.54089</u>	-0.08050	0.09636
10.475*	3.089	1.910	1.647	1.473	1.328	1.096	1.030	0.985
34.9%**	45.28	51.64	57.18	62.08	66.48	70.18	73.58	76.88

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-14

ROTATED FACTOR MATRIX FOR SU-XN (N.Z.)

VARIABLE 1 0.34294	-0.07194	-0.12632	0.07843	<u>0.75352</u>	-0.09398	-0.00506
VARIABLE 2 -0.05849	-0.31461	0.19192	0.02140	<u>0.63036</u>	-0.13238	0.07147
VARIABLE 3 0.21045	-0.37744	0.27918	<u>0.50810</u>	<u>0.40347</u>	-0.01387	-0.08067
VARIABLE 4 0.03272	-0.17049	<u>0.45260</u>	0.00154	<u>0.50047</u>	0.14428	<u>0.48282</u>
VARIABLE 5 0.15892	-0.16733	0.15287	0.06634	-0.00725	<u>-0.79475</u>	0.13723
VARIABLE 6 0.31255	-0.20460	-0.13957	<u>0.47112</u>	0.14404	<u>-0.93404</u>	-0.22226
VARIABLE 7 0.30328	-0.26781	-0.02656	0.35274	<u>0.97348</u>	0.24878	0.10574
VARIABLE 8 0.34077	0.17581	<u>0.48165</u>	0.29356	0.17931	-0.25671	0.23466
VARIABLE 9 0.13844	<u>-0.79270</u>	0.09497	0.26626	0.11577	-0.08276	0.04897
VARIABLE 10 0.08791	-0.11496	0.06420	0.16229	-0.07458	-0.08161	0.08303
VARIABLE 11 0.09835	-0.10737	<u>0.41350</u>	0.22185	0.03447	-0.04117	-0.02063
VARIABLE 12 0.76160	-0.26430	0.18692	0.12907	0.16521	0.05594	0.15598
VARIABLE 13 0.15907	-0.39068	<u>0.48671</u>	0.39498	0.10295	-0.06228	0.01324
VARIABLE 14 0.41351	0.06689	<u>0.53247</u>	0.01864	-0.04919	-0.14481	-0.26110
VARIABLE 15 0.34409	-0.06926	<u>0.53688</u>	0.22883	0.35391	-0.20765	-0.07767
VARIABLE 16 0.09724	<u>-0.41352</u>	0.30459	0.08024	0.33147	-0.39107	0.00659
VARIABLE 17 0.08028	0.00761	0.25955	0.22249	0.16767	-0.22209	0.06593
VARIABLE 18 0.72147	-0.02935	0.31517	0.25004	0.20663	-0.15960	0.07647
VARIABLE 19 0.00302	-0.19911	-0.15135	<u>0.40642</u>	0.01514	-0.11001	<u>0.59830</u>
VARIABLE 20 0.77584	-0.10567	0.10653	0.11119	0.03344	-0.00050	-0.07105
VARIABLE 21 0.18910	-0.13456	<u>0.78075</u>	-0.04212	-0.08691	-0.00967	-0.03542
VARIABLE 22 0.22218	-0.07459	0.04540	<u>0.83705</u>	-0.06476	-0.01124	0.08622
VARIABLE 23 0.07482	-0.15704	0.15720	<u>0.74735</u>	0.16029	-0.10788	0.16062
VARIABLE 24 0.33721	-0.20603	<u>0.71455</u>	0.14131	0.15120	-0.01876	0.25286
VARIABLE 25 0.38111	<u>-0.60434</u>	0.10816	0.01088	-0.00373	-0.19385	0.39674
VARIABLE 26 0.38584	<u>-0.55942</u>	0.06133	0.39678	0.20259	-0.14367	-0.03885
VARIABLE 27 0.01089	-0.14076	0.37632	<u>0.44786</u>	0.32746	-0.17091	0.04192
VARIABLE 28 0.01337	-0.08557	0.10019	-0.02899	0.18740	-0.06871	0.01598
VARIABLE 29 0.00220	-0.15449	0.09234	-0.00756	0.28283	-0.30236	<u>0.41652</u>
VARIABLE 30 -0.00026	<u>-0.79527</u>	0.06631	0.04160	0.24952	-0.05583	0.10804

10.602*	2.581	1.820	1.493	1.341	1.110	1.015
35.38**	43.9%	50.0%	55.0%	59.5%	63.2%	66.5%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-15

ROTATED FACTOR MATRIX FOR SU-NB (KOR)

VARIABLE 1	0.06401	-0.48102	-0.07899	0.21023	0.68000
VARIABLE 2	0.22825	-0.37633	0.00219	0.08617	0.67093
VARIABLE 3	0.06625	-0.52215	0.29790	-0.18744	0.55567
VARIABLE 4	0.06049	-0.36180	-0.22876	-0.50149	0.15813
VARIABLE 5	0.08960	-0.60456	-0.06431	0.11409	0.49896
VARIABLE 6	0.09024	-0.67229	0.17290	0.22124	0.25815
VARIABLE 7	0.02064	-0.68141	-0.22911	0.20866	0.08563
VARIABLE 8	0.02742	-0.69030	-0.29599	-0.30920	0.12607
VARIABLE 9	0.12311	-0.54969	0.03525	-0.34919	0.44766
VARIABLE 10	0.34345	-0.52665	-0.23022	0.04968	0.22293
VARIABLE 11	0.01742	-0.78957	-0.13780	-0.21151	0.06654
VARIABLE 12	0.09035	-0.56835	-0.42064	0.13972	0.36262
VARIABLE 13	0.09450	-0.70910	-0.12174	-0.17478	0.23273
VARIABLE 14	0.36975	-0.13686	-0.55284	0.14128	0.51444
VARIABLE 15	0.20072	-0.64962	-0.20564	-0.23953	0.21699
VARIABLE 16	0.03431	-0.46078	-0.07090	0.06415	0.62399
VARIABLE 17	0.13394	-0.56665	-0.06170	-0.62329	0.29161
VARIABLE 18	0.01245	-0.46167	-0.36572	-0.15974	0.36258
VARIABLE 19	0.23027	-0.35250	-0.04814	-0.45654	0.47322
VARIABLE 20	0.25705	-0.54541	-0.50162	-0.25490	0.14226
VARIABLE 21	0.18263	-0.15523	-0.68858	-0.19581	0.21504
VARIABLE 22	0.32101	-0.49362	-0.27258	-0.04669	0.45845
VARIABLE 23	0.07805	-0.49544	-0.20232	-0.04926	0.38951
VARIABLE 24	0.16084	-0.52988	-0.51949	-0.34672	0.10504
VARIABLE 25	0.27072	-0.38896	-0.25465	-0.26166	0.54399
VARIABLE 26	0.04182	-0.55723	-0.03628	-0.20563	0.52006
VARIABLE 27	0.09502	-0.69445	-0.23566	-0.26181	0.19912
VARIABLE 28	0.51849	-0.17471	-0.02557	-0.12435	0.59455
VARIABLE 29	0.50432	-0.35690	-0.20349	-0.05394	0.53204
VARIABLE 30	0.07273	-0.39040	0.03527	-0.46549	0.50562

13.310*	1.860	1.525	1.278	1.189
44.44**	50.6%	55.7%	59.9%	63.9%

* Eigenvalues ** Cumulative percentage of Eigenvalues

Appendix 16-16

ROTATED FACTOR MATRIX FOR SU-NB (N.Z.)

VARIABLE 1 0.11282	-0.14952	0.12504	0.01142	<u>-0.44764</u>	<u>0.59306</u>	-0.07123	0.06849	0.07678
VARIABLE 2 0.31019	-0.00462	0.22813	0.06707	0.03376	<u>0.75189</u>	-0.04564	0.24873	-0.06291
VARIABLE 3 0.67290	0.00977	0.01413	-0.35029	-0.00748	<u>0.54975</u>	-0.01086	-0.13660	0.29367
VARIABLE 4 0.06302	-0.08185	<u>0.62389</u>	-0.18946	-0.06301	<u>0.51934</u>	0.14501	-0.09536	0.03809
VARIABLE 5 0.08795	-0.01058	0.03729	-0.15112	-0.28265	0.15706	0.25557	-0.10154	0.29678
VARIABLE 6 0.13660	-0.36549	-0.29284	-0.28119	-0.26459	<u>0.53714</u>	0.09186	-0.08650	0.21327
VARIABLE 7 -0.05104	-0.06291	0.00328	<u>-0.74623</u>	-0.36158	0.15305	-0.10671	0.12054	-0.16978
VARIABLE 8 0.03593	-0.19173	0.17523	<u>-0.82514</u>	-0.08808	-0.02846	0.16427	0.05742	0.11135
VARIABLE 9 0.05306	-0.03415	0.10637	-0.19661	-0.15101	0.36735	-0.23875	0.18670	0.19774
VARIABLE 10 0.07253	-0.20238	0.03952	-0.18927	-0.11041	0.11882	0.17220	<u>0.78666</u>	0.13921
VARIABLE 11 0.14902	-0.02469	0.17313	-0.12785	<u>-0.59950</u>	0.23367	0.00195	0.04360	<u>0.47306</u>
VARIABLE 12 -0.18273	<u>-0.58463</u>	0.15044	-0.15373	<u>-0.43968</u>	0.31931	-0.15857	0.32945	0.14834
VARIABLE 13 0.30741	-0.13365	0.16326	-0.21227	-0.24881	0.14793	<u>-0.48094</u>	0.11665	<u>0.48031</u>
VARIABLE 14 -0.08359	0.00414	0.22063	-0.04401	-0.19137	-0.00162	<u>0.78117</u>	0.18004	0.12035
VARIABLE 15 0.23925	0.08899	<u>0.69293</u>	-0.02924	<u>-0.40710</u>	0.24669	-0.12059	-0.26800	0.21320
VARIABLE 16 0.62528	-0.31101	0.17580	0.09626	-0.05327	0.22875	-0.01231	-0.26347	-0.00604
VARIABLE 17 0.12417	-0.29647	0.04222	-0.19370	<u>-0.78315</u>	0.08823	0.08213	0.01891	0.14980
VARIABLE 18 0.31386	-0.26642	0.11665	-0.16077	<u>-0.73809</u>	-0.02595	0.20890	0.10525	-0.03561
VARIABLE 19 0.34934	-0.29405	-0.14328	<u>-0.52523</u>	0.09580	0.15577	0.03290	0.18533	0.29409
VARIABLE 20 0.16426	<u>-0.53417</u>	-0.04951	-0.23045	-0.31526	0.17832	-0.08556	0.20788	-0.05267
VARIABLE 21 0.35454	0.13725	<u>0.74282</u>	-0.03688	0.08693	-0.00408	0.20999	0.21211	-0.01846
VARIABLE 22 0.06491	<u>-0.62382</u>	0.10395	-0.27988	-0.19878	-0.05715	-0.15648	0.04768	0.28602
VARIABLE 23 0.23353	-0.18649	0.22352	-0.05252	-0.12424	0.03981	0.14753	0.14568	<u>0.73316</u>
VARIABLE 24 0.11735	-0.16119	<u>0.74444</u>	-0.04112	-0.26058	0.06531	0.00498	-0.02776	0.28963
VARIABLE 25 0.32012	<u>-0.58352</u>	0.14857	0.05197	-0.26244	0.07316	-0.05766	0.10376	-0.19779
VARIABLE 26 0.61315	-0.25499	0.12658	-0.07405	-0.16736	0.08803	-0.04905	0.07689	0.35262
VARIABLE 27 0.45380	-0.14464	0.38655	<u>-0.45675</u>	-0.27676	0.03907	-0.14320	0.02216	0.22171
VARIABLE 28 -0.08817	<u>-0.84238</u>	-0.05600	-0.01765	0.09585	0.03982	0.14583	-0.00390	0.18996
VARIABLE 29 0.36491	<u>-0.72242</u>	-0.01842	-0.12884	-0.34897	0.07290	-0.00913	0.06820	-0.01823
VARIABLE 30 0.68289	-0.01537	0.37552	0.02476	-0.08777	0.11946	-0.19600	0.32024	0.03843
9.509*	2.831	1.894	1.620	1.437	1.304	1.179	0.999	0.989
31.7%**	41.1%	47.4%	52.8%	57.6%	62.0%	65.9%	69.2%	72.5%

* Eigenvalues ** Cumulative percentage of Eigenvalues